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October 23, 1961

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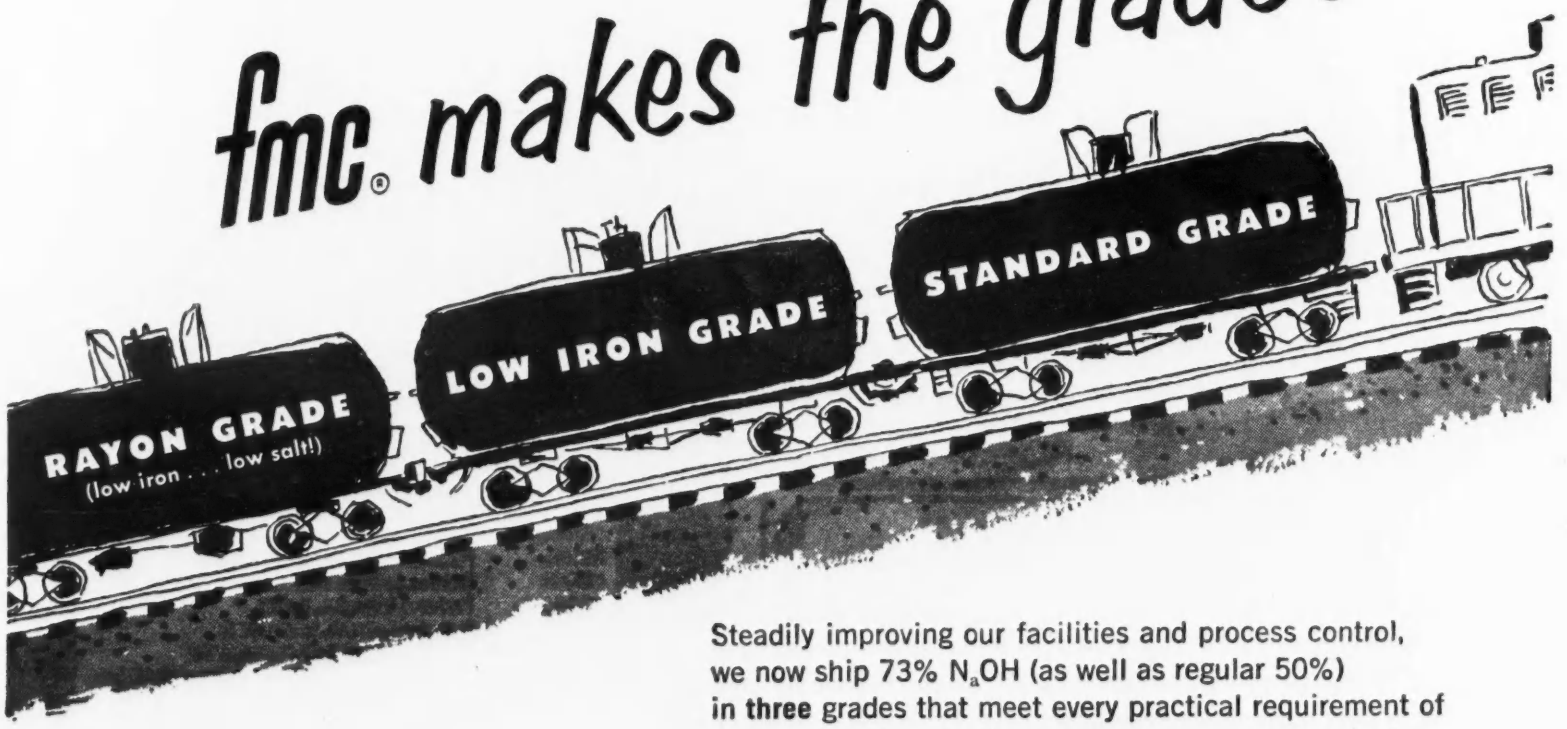

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IN TOP POST: H. Robert Marschalk, advanced from executive vice-president to president of Richardson-Merrell, Inc., New York. Smith Richardson, jr., former president, has become board chairman, filling the place of E. L. Mabry, who has been elected chairman of the executive committee.

Eastman Is Thinking About Polypropylene

Eastman Kodak Company has big plans for polypropylene: a 50 percent increase in production capacity. The company will add a new unit—with a designed capacity of 10 million pounds annually—to the present plant operated in Longview, Tex., by the Texas Eastman Company division.

When the addition is completed, Eastman will have a total annual production capacity of approximately 30 million pounds of "Tenite" polypropylene at its Texas facility.

The growing market seen for Eastman polypropylene in the plastics industry, company officials said, is responsible for the decision to enlarge a plant that was completed only in the past few months.

"Our polypropylene plant," Texas Eastman says, "uses a process invented in Eastman laboratories. It is so laid out that the new unit as well as future units can be added without interfering with present operations. To assure adequate supplies of propylene, a long-term contract has been made for an additional supply of propane to be brought by pipeline from South Texas.

Sales of Eastman's "Tenite" polypropylene plastic are handled by Eastman Chemical Products, Inc., the marketing subsidiary for Eastman's plastics, man-made fibers, and industrial chemicals.

Kefauver Group to Hear Former Squibb Executive

Sen. Estes Kefauver's monopoly Committee will hear Dr. A. Dale Console, former medical director of E. R. Squibb & Son division of Olin Mathieson Chemical Corporation, New York, October 31, when it resumes consideration of S 1552.

Also appearing on that date will be a representative from the patent, trademark and copyright section of the American Bar Association. Scheduling of other witnesses has not yet been completed, but the Tennessee senator expects to conclude the patent phase of the hearings during the next two days.

Robert R. Larson, president of the American Patent Law Association, who testified last week, has been called back for committee questioning on November 2.

There will be no further hearings in November. Starting December 6, representatives of the Pharmaceutical Manufacturers Association will state their views on S 1552.

Sunkist Alters Sales Policy, Picks Ungerer as Oils Agent

Sunkist Growers, Los Angeles, has established a new sales policy for its "Exchange" brand essential lemon and orange oils. After November 1, the Sunkist industry sales force will sell these oils directly to the US and Canadian trade.

In addition, Sunkist has retained Ungerer & Co., New York, as a national distributor for its essential oils. The "Exchange" brand oils will then be available both directly from Sunkist or through Ungerer & Co.

"Exchange" brand is said to be the oldest trade name in the citrus oil business.

Patents Chief Only Lukewarm To S 1552 and Cold to Sections; Business Loud in Its Criticism

Manufacturing Chemists' Association stated its position on S 1552 in a letter to the senate monopoly committee late last week, and its views are reported on in a separate story on page 5.

If Sen. Estes Kefauver was hoping for a thumping endorsement of his drug industry antitrust bill (S 1552) from the Commissioner of Patents, he's a sadly disappointed man these days. Judging by David L. Ladd's testimony before the senate monopoly committee last week, the Patent Office chief's attitude toward patent provisions of the measure appears to be, on the whole, lukewarm—and, to some sections of the legislation, he is downright cold.

Nor can he draw any comfort from the unsurprising chorus of criticism that rose from the American Patent Law Association, the National Association of Manufacturers, the Chamber of Commerce of the United States and the New York Patent Law Association. And two chemists also added their voices in opposition.

Patent Provisions of S 1552

S 1552, besides imposing new regulations on the prescription drug industry, would make a number of major changes in US patent laws and procedures. The measure would:

- Require that holders of drug patents grant licenses three years after issuance of the patent, at a royalty of no more than 8 percent. (Drug patents, like others, now have a seventeen-year life.)
- Deny patents for drug modifications and combinations unless the Secretary of Health, Education & Welfare determines that the new drug has 'significantly" greater therapeutic effects than products already on the market.
- Forbid drug patent applications from entering into any interference agreements prior to issuance of the patent.
- Deny patents to new drugs unless the Food & Drug Administration is satisfied with the degree of efficacy demonstrated by the drugs.

What solace there is for the Tennessee Democrat was afforded by the supporting testimony of a spokesman for the Nationwide Insurance Company of Columbus, Ohio, and a Chicago patent attorney.

The new batch of hearings—which, oddly enough, coincided with American Patent System Week marking the 125th anniversary of the passage of the patent act of 1836—opened on a familiar controversial note.

Harping on an oft-stated theme, Sen. Kefauver noted in an introductory state-

—Continued on page 69

ON THE BOARD: T. S. Petersen, president and director of Standard Oil Company of California, elected a director of FMC Corporation, San Jose, Calif.

Tall Oil Installation On Hercules' Agenda

Hercules Powder Company, Wilmington, Del., plans to build a multi-million-dollar tall oil fractionating plant in Portland, Ore. The unit, first of its kind on the west coast, will have sufficient capacity to utilize the crude tall oil available from kraft pulp manufacturers in the important timber regions of the Pacific Northwest.

Hercules, long a supplier of chemicals for the paper industry, is also a producer of rosins and fatty acids from tall oil fractionation plants in Franklin, Va., and Savannah, Ga.

The fractionation facilities will be located on the existing Hercules plant site at Portland. This plant produces rosin size and other important paper-making chemicals. Construction will start imme-

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Chemical Marketing Cues . . .

33 MAGNESIUM: A slow starter is now picking up some speed.

44 CARBON BISULFIDE: Production up; rayon staple is the reason.

47 COLLOIDAL SILICAS: Sales get a boost from new end-use pattern.

48 PYRIDINE: Demand strong, supply tight, relief is on the way.

Drug Wage Rate: Surprise! Unions Are Thinking Big

Drug firms doing business with the government will have to pay a minimum wage of $1.73 an hour—a whopping increase of 53 cents over the rate that has been in effect since 1958—if the labor unions have their way.

Asking for this industry-wide wage hike are two AFL-CIO unions, the International Chemical Workers Union and the Oil, Chemical & Atomic Workers Union, which claim they've organized about a third of the employees in the drug and medicine industry.

Drug Wage Minimums: A History

Following are the prior minimum wage determinations under the Walsh-Healey public contracts act for the drugs and medicine industry:

1939.....	37½ cents an hour.
1941.....	40-cent minimum at the time (toilet preparations added to industry).
1950.....	75 cents (fair labor standards minimum).
1952.....	93 cents (drugs and medicine branch).
1952.....	85 cents (toilet preparations branch).
1956.....	$1 as part of omnibus proceeding (minimum wage determinations below $1 raised to fair labor standards minimum of $1 an hour).
1958.....	$1.20 (excluded toilet preparations).

Their demand was presented last week by Seymour Brandwein, an AFL-CIO economist, at a one-day Walsh-Healey act wage hearing held by the Department of Labor in Washington.

Mr. Brandein was the sole non-government witness at the hearing. Several drug houses, however, had observers present, as did the Pharmaceutical Manufacturers Association and the Drug, Chemical & Allied Trades Association.

The AFL-CIO economist based the union case on figures taken from a wage survey conducted by the Department of Labor in March. He contended that the most useful figure, for purposes of a Walsh-Healey wage determination, was the rate paid the median employee in the industry in March: $1.69 an hour.

While he conceded that this approach took in only about a fifth of the drug

—Continued on page 49

Air Products Purchases Sun's Holdings in Houdry

Sun Oil Company has accepted an offer by Air Products & Chemicals, Inc., to buy the 160,000 shares of Houdry Process Corporation stock owned by Sun. Sun first confirmed the offer two weeks ago (OPD, 10/16/60).

Air Products says it will make an offer shortly to other Houdry stockholders for the remaining shares of the company. Plans are to merge Houdry into Air Products as an autonomous division.

Air Products' acquisition would include the stock of Houdry's wholly-owned subsidiary, Catalytic Construction Company, which would operate as a separate, wholly-owned subsidiary of Air Products, but generally responsible to Houdry as in the past.

Acquisition of Sun's stock was effected 50 percent by cash and 50 percent by a one-for-one stock exchange.

Montecatini Licenses Japs For Polypropylene Output

Montecatini, of Milan, Italy, has just completed licensing agreements with six prominent Japanese companies to produce its "isotactic" polypropylene plastic and fiber.

Mitsubishi Petrochemical Company, Mitsui Chemical Industries and Sumitomo Chemical Company will produce "isotactic" polypropylene chiefly for plastics uses, while Mitsubishi Rayon Company, Toyo Rayon Company and Toyo Spinning Company have been licensed by Montecatini for the production of "isotactic" polypropylene fibers.

Montecatini produces "isotactic" poly-

—Continued on page 36

Soviets Moving Fast and Wide In Race Against US Chemicals

The Soviet Union is moving rapidly and over broad territory in its efforts to catch up to—and surpass—US chemical endeavors. This year, the USSR hopes to produce 1.5 times more plastics than in 1960; 1.4 times as many synthetic fibers and almost three times as much synthetic ethyl alcohol. Test output of enanthic fiber (nylon-7) will begin this year and production of various polyester acrylates will continue. These are only a few of the developments reported in the Department of Commerce publication "English Abstracts of Selected Articles from Soviet Bloc and Mainland China Technical Journals," put out by the department's Office of Technical Services.

Other developments include:

- Furfuryl alcohol-acetone copolymers — work pushes ahead on condensation products of furfurol and acetone, specifically furfurylidine and difurfurylidine acetones.
- Introduction of a divinylstyrene rubber containing 30 percent styrene oil-extended with 15 percent oil content, said to be "softer" than other styrene-type rubbers.
- Development of an extraction process for heavy pyridine bases from creosote and naphthalene oils, now in use at the Kuznetsk works.
- Recommendation by a scientific committee that pyrolysis tar wash byproduct from ethanol manufacture be recovered and utilized, as well as that from cokeoven tar operations.
- Development of a new low-temperature plasticizer using monocarboxylic acids rather than the more commonly-used dicarboxylic acids.
- Scaleup of output of new polymeric substances including polybutylene, polyisoamylene, and polyvinylcyclohexane.
- Pushing research work on polyacetone resins; polymerizing at low temperatures and blocking polymer chains.
- Synthesis and strong research and development work on foam plastics of polyesters of terephthalic acid and tolylene di-isocyanate.

A large area of expansion in the Soviet chemical industry is apparently in the Gorkiy sovnarkhoz. There, chemical out-

—Continued on page 31

Druggists Ban Paper With Pricing Expose

The Chicago *American* charges that the city's 101 drug stores refused to sell its Sunday (October 15) edition, which carried a critical article about retail pricing of prescription pharmaceuticals.

According to the *American*, perhaps 100 other stores in Chicago's suburbs did not sell the Sunday edition. The paper adds that the Monday (October 16) edition, with a reprint of the story, was similarly rejected by some stores.

The article included the statement that some pharmacies currently "charge at prices which represent markups ranging from 1,350 percent for items sold in small quantities to 100 percent for those sold in original containers or in ten-lots."

Phthalic Anhydride: S-W All Set to Boom

Sherwin-Williams Company is all set to expand its phthalic anhydride capacity to 20 million pounds annually by way of a new 8-million-pound-a-year unit in Chicago. The added capacity is slated for start-up in mid-1962.

Costing about $1.5 million to build, the new unit will employ the fluidized catalyst-bed technic pioneered by Sherwin-Williams in 1944. Badger Manufacturing Company, Cambridge, Mass., will handle engineering and construction.

According to Sherwin-Williams, the fluidized bed process now accounts for

—Continued on page 54

Erdolchemie to Expand Petrochemical Facilities

Erdolchemie, petrochemical producer jointly owned by Farbenfabriken Bayer of Germany and the German subsidiary of British Petroleum, is launching a major $85 million expansion program.

The new projects, when completed, will give Erdolchemie capacity for 115,000 tons of ethylene annually, 36,000 tons of ethylene oxide, 54,000 tons of ethanol, 110,000 tons of propylene and 60,000 tons of butadiene. The first stage of Erdolchemie's operations has been completed since 1957 at a cost of about $75 million.

Chemical Fertilizer Concern Is Forming in Netherlands

A major fusion of Dutch chemical fertilizer interests is planned with Royal Dutch/Shell, Koninklijke Zoutindustries (KNZ), a major chemical company, and Hoogovens, Holland's biggest steel producer, pooling their interests in a new company, Verenigde Kunstmestfabrieken Mekog-Albatross.

Royal Dutch and Hoogovens already own Mekog jointly, with Hoogovens holding a one-third interest. Mekog is a major fertilizer producer. KNZ owns Albatross Superphosphate Fabrieken, another fertilizer maker. In the new company Royal Dutch and KNZ will each hold 40 percent with Hoogovens having 20 percent.

This merger is believed to be one effect of the discovery of a major natural

—Continued on page 54

The Week's Price Changes

Cocoa Butter, Cottonseed Meal, Soybean Meal, Tin Advanced. Copra, Cottonseed Oil, DDT, Lard, Phthalic Anhydride Reduced.

Prices Advanced

Cocoa butter, 2c. per lb. (p. 61).
Corn oil, crude, 1c. per lb. (p. 61).
Refd., 1c. per lb. (p. 61).
Cottonseed meal, $1 per ton (p. 61).
Greases, ⅛c. per lb. (p. 61).
Linseed meal, $1.50 per ton (p. 61).
Peanut oil, crude, ½c. per lb. (p. 61).
Refd., ½c. per lb. (p. 61).
Soybean meal, $1.50 per ton (p. 61).
Tallow, edible, ⅜c. per lb. (p. 61).
Inedible, ⅛c. to ¼c. per lb. (p. 61).

Prices Reduced

Carnauba wax, No. 3, crude, 1c. to 2c. per lb.
No. 2, refd., 2c. per lb. (p. 61).
DDT, 4c. per lb. (p. 46).
No. 3, Refd., 3c. per lb. (p. 61).
Yellows, 4c. per lb. (p. 61).
Coconut oil, ¼c. per lb. (p. 61).
Copra, $2.50 per ton (p. 61).
Cottonseed oil, crude, ¼c. per lb. (p. 61).
Refd., ¼c. per lb. (p. 61).
Lard, cash, 3/10c. per lb. (p. 61).
Ouricury wax, refd., 1c. per lb. (p. 61).
Phthalic anhydride, 2½c. per lb. (p. 49).
Rapeseed oil, 1c. per lb. (p. 61).
Soybean meal, $1.50 per ton (p. 61).
Soybean oil, crude, ¼c. per lb. (p. 61).
Refd., ¼c. per lb. (p. 61).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Oct. 20, 1961	Oct. 13, 1961	Oct. 21, 1960
113.80	113.79	110.00

Chemicals in Food: False Fear

Food fadists are hampering the progress of agriculture by "deliberately fomenting a wave of fear and alarm among the consumers of our country." Such is the opinion of Dr. Robert H. White-Stevens of American Cyanamid Company's agricultural division. Dr. White-Stevens finds genuine cause for fear and alarm in the lobbying and propaganda activities of such fadists, which he sees as blazing a legislative trail that could reduce farm progress to "a veritable shambles."

Speaking at the fourteenth annual Animal Industrial Conference in Fresno, Calif., last week, he cited the Delaney clause of the 1958 food additives amendment as an ominous case in point.

Delaney Clause's 'Failure'

By failing to define "carcinogen," the Delaney (anti-cancer) clause virtually precludes all new compounds from the agricultural and food market—if interpreted strictly, he said.

Besides omitting the all-important definition, the law gives no indication as to what allowable dosage level and resulting residue tolerance can be arrived at, Dr. White-Stevens noted.

In a more direct attack on the food fadists, he exploded the oft-quoted argument that only "naturally grown foodstuffs" are safe for human consumption.

"There are in fact," he declared, "a whole array of well-accepted and long-used foods which are now known to contain appreciable amounts of suspect carcinogens."

As examples, he listed tannic acid in

—Continued on page 37

Carbon Black Capacity Is Doubled in Australia

Australian Carbon Black Pty., Ltd., has completed a $1.2 million expansion, doubling the capacity of its Altoona, Victoria, carbon black plant to 60 million pounds a year.

The company, a joint venture of Union Carbon Company, of Houston, Tex., and Cabot Corporation, Boston, Mass., operates the only carbon black unit in Australia.

The expansion program included a second furnace unit, new collection equipment and two new 55,000-barrel tanks.

ENTERS CHEMICALS: M. Stuart Roesler, former vice-president and director of Empire Trust Company, New York, has gone into the chemical business as vice-president and treasurer of Kawecki Chemical Company, Boyertown, Pa.

Phthalic Cut by Allied

Allied Chemical Corporation, as of press time Friday (October 20), reduced the price of phthalic anhydride 2½ cents a pound across the board. The move was made in anticipation of a lower price for naphthalene. New prices are: tanks, 15 cents; carloads, 15½ cents, and less carload, 16½ cents.

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Chemical Pipe Dreams

Imagine this!

The country will one day be veined by a network of giant pipelines, criss-crossed and subtle, not only carrying chemicals, but even mixing them in transit.

The man predicting it all is Charles C. Whittelsey, president of the New York engineering firm of Ford, Bacon & Davis, Inc. His pipe dreams, already a reality for liquefied gases and some petrochemicals brightened last week's convention of the American Society of Civil Engineers in New York.

"Pipelines," said Mr. Whittelsey, "will act as miles-long mixing vats in which raw materials are processed during transit."

Conversely, they will carry different kinds of materials in the same artery—for separation at the end of the line, he added.

Mr. Whittelsey noted that solids are already being pumped short distances, and that coal mixed with water moves more than 100 miles through Ohio to a Lake Erie power station.

"Many industrial raw materials and chemicals moving today by truck and rail will be transported by pipelines tomorrow," he predicted.

"Anything that can be made to flow can be piped, hour after hour, night and day, regardless of wind, rain, snow or traffic conditions!"

The pipeline is second to none in its ability to move vast quantities of material, and when the demand and load factor is high enough, the pipeline is without peer in its economy, the engineering executive said.

Mr. Whittelsey noted that experiments are being conducted for processing wood pulp during transit, and that the piping of wheat, rice and other grains is "a challenging problem for the imaginative engineer."

MCA Joins Chorus of Criticism Against Kefauver Drug Trust Bill

Manufacturing Chemists' Association has added its voice to the chorus of criticism against S 1552. It particularly doesn't like section 3 of the measure dealing with patents. In a letter to the senate monopoly commitee following the conclusion of last week's series of hearings (see separate story on page 3), MCA spokesman Dr. Charles Allen Thomas said that the bill, if enacted, "will severely weaken the patent system in the drug field and by possible extension in the chemical field, and will remove to a very great extent the incentive for research which our patent system has afforded up to now."

WITH PARENT FIRM: Arthur W. Lucas, vice-president of finance for Chemstrand Corporation, a wholly-owned subsidiary of Monsanto Chemical Company, St. Louis, Mo., made a Monsanto vice-president.

Dr. Thomas, who is chairman of Monsanto Chemical Company, St. Louis, Mo., feels that the reduction of a drug patent's life from seventeen years to three "is incompatible with the basic purpose of our patent system."

Inventor Is Short-Changed

For, he points out, it denies an inventor "a reasonable period of exclusivity for the invention in return for disclosure of the invention to the public."

What may happen says the MCA spokesman, is that they will decide that "they have more to gain by keeping their inventions secret than by disclosing their inventions in return for the limited, and in many cases illusory," patent protection granted in the bill.

And, he adds, "if a trend develops of keeping inventions secret, because of a

—*Continued on page 38*

Alco Makes a Move Into Farm Chemicals

Alco Oil & Chemical Corporation, Philadelphia-based chemical specialties manufacturer, has expanded its operations into the farm chemical field through acquisition of Miller Chemical & Fertilizer Corporation, Baltimore, Md.

The merger also brings three affiliated companies into Alco's fold. They are Miller Chemical Corporation, Charles Town, W. Va.; Union Fertilizer Corporation, Baltimore, Md., and Miller Chemical Company of New Jersey, Bridgeton, N.J.

W. Newton Long, board chairman of

—*Continued on page 36*

Pfizer Sets an Expansion At New England Lime Co.

Chas. Pfizer & Co., Inc. has completed acquisition of New England Lime Company, Adams, Mass., and outlined plans to "substantially increase" productive capacity.

In a transaction completed last week, Pfizer acquired the assets, business and good will of New England Lime in exchange for approximately 313,000 shares of Pfizer common stock. The acquisition included the stock of Nelco Metals, Inc., a subsidiary in Canaan, Conn., which produces high purity metallic calcium and magnesium in addition to limestone products.

Plans already are underway for a capital investment program which will substantially increase the productive capacity of the New England Lime operations at Adams and Canaan, Pfizer says.

OPD Reports From Europe

Chemical Executives Abroad Have a Serious Complaint: Dumping by the Americans

European chemical company executives are beginning to agitate for Common Market anti-dumping regulations as stringent as America's laws—the new Europe-wide provisions to be aimed mainly at US chemical producers. Some idea of the bitterness developing in Europe over alleged American cut-price chemical selling is the joke making the rounds of the chemical industry: A European producer buys a shipload of polyethylene in New York, sails it out of the harbor, turns it around immediately, sails it right back in and dumps it on the American market at the US export invoice price.

French chemical industry commentators claim the only shadow on France's petrochemical future is the "dumping by American firms which seriously lowers the prices of polyethylene and ethylene glycol."

What Hoechst Expects

Farbwerke Hoechst AG, one of Germany's "Big Three" companies, expects sales volume in 1961 to rise 7 percent against an 11 percent gain in physical volume.

Dr. Karl Winnacker, managing director, complains particularly about US export price cutting, though Italian exports to Germany also are reported to be undermining list tabs there.

In England, Laporte Industries, a producer of hydrogen peroxide and titanium dioxide, is also quoted as complaining about Italian and US price-cutting competition.

American chemical companies in the first half continued to be the biggest exporters of chemicals into Germany, accounting for 26.8 percent of total imports of $340 million, according to the Verbandes der Chemischen Industrie in Frankfurt.

The greatest impact of these imports is thought to be in plastics, especially various types of polyethylene. German producers complain that their polyethylene prices are now half the figures for 1958-59.

So far, though, these difficulties haven't brought a rash of cutbacks in chemical expansion. Dr. Winnacker of Hoechst reports that his company this year will spend $105-110 million and the Hoechst management has already approved a 1962 budget running around $100 million, hardly a substantial retrenchment.

The latest *Chemical Age* survey of the British industry shows total chemical expansion projects up to $840 million against $560 million a year ago.

But there are signs, London observers say, that the current squeeze on profits is making British companies much more cautious and the level of expenditure may

—*Continued on page 35*

US Sells 300 Tons of Tin From 1,000-Ton Offering

General Services Administration last week sold 300 tons of pig tin out of an offering of 1,000 tons.

Philipp Brothers, New York, bought 100 tons of grade A—fifty tons at 19.45 cents per pound and fifty tons at 19.27 cents. Another fifty tons of grade A tin were sold to two other buyers at prices ranging from 19.25 cents per pound to 19.53 cents.

Largest buyer of grade B tin was Brandeis-Goldschmidt of New York, which bought fifty tons—thirty tons at 17.91 cents per pound and the balance at 17.61 cents per pound. Another fifty tons of grade B were sold to two other buy-

—*Continued on page 37*

ADVANCES: Wallace E. Gordon, named general manager of the industrial and biochemicals department of E. I. duPont de Nemours & Co., Wilmington, Del. He will fill the post of Clark W. Davis, who is retiring.

Helium Unit Contract: Biggest One Awarded

The government's helium conservation program got its biggest boost aloft last week as plans were set for a $25 million facility at Liberal, Kan.—the world's largest. Department of the Interior simultaneously announced a contract under which the plant will supply the government with one billion cubic feet—or $15.2 million worth—of helium annually.

Contractor for the facility, the third scheduled so far under the program, is National Helium Corporation, a joint venture of Panhandle Eastern Pipe Line Company and National Distillers & Chemical Corporation, both of New York.

Construction is scheduled to start in mid-1962, and completion is expected in about two years.

Helium will be extracted at minus 300 degrees Fahrenheit from natural gas that flows into Panhandle's main compressor station at Liberal.

Panhandle will supervise the operation of the plant and will supply, through 1,300 miles of field gathering lines, all natural gas for helium extraction as well as for fueling the processing operation.

President of newly-formed National Helium Corporation is Francis J. McElhatton, a vice-president of Panhandle.

—*Continued on page 54*

Hooker Weighs Merger With Parker Rust Proof

Hooker Chemical Corporation, New York, and Parker Rust Proof Company, Detroit, Mich., are negotiating for a merger of Parker Rust Proof into Hooker. Terms would be: the issuance of three-quarters of a share of Hooker common stock for each of the outstanding shares of Parker, and one share of a new 5 percent preferred stock, $100 stated value, of Hooker for each twenty shares of outstanding stock of Parker.

Should the negotiations be approved by the boards of directors of both companies, the proposal would be submitted to the stockholders early next year.

Citizens' Committee Formed to Write New Rx for FDA

Another Citizens' Advisory Committee has been formed to write a new prescription for the Food & Drug Administration.

Unlike the 1955 committee, whose chief recommendation was a three-to-four-fold expansion of FDA inside of five to ten years, the new group will concentrate on problems of consumer protection under the federal food, drug and cosmetic act.

Secretary of Health, Education & Welfare Abraham Ribicoff says the new committee will make recommendations regarding steps which HEW and FDA should take to insure adequate protection to the public in its use of foods, drugs, therapeutic devices, cosmetics and household chemical products.

HEW estimates the retail value of such articles moving in interstate commerce tops $100 billion each year.

The sixteen-man committee will be headed by Dr. George Y. Harvey, lecturer in political science and consultant in community development at the University of Missouri. From 1948 to 1955, Dr. Harvey was staff director of the house appropriations committee.

Two industry figures have been named members of the committee. They are John T. Connor, president of Merck & Co., Rahway, N.J., and Jack I. Poses, president of Parfums D'Orsay, New York.

A former assistant secretary of HEW—Bradshaw Mintener—is also a member. Mr. Mintener is now specializing in food and drug law.

Since the 1955 committee offered up its views, the FDA staff has about doubled in size and several new laws—notably

—*Continued on page 37*

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2-NITROPROPANE

THE BENEFITS OF 2-NP AS A SOLVENT FOR VINYL AND EPOXY COATINGS

A report from

COMMERCIAL SOLVENTS CORPORATION

NITROPARAFFINS DEPARTMENT

D.P.D.R

COMMERCIAL SOLVENTS CORPORATION

NITROPARAFFINS DEPARTMENT

260 MADISON AVENUE, NEW YORK 16, N. Y.

Atlanta • Boston • Chicago • Cincinnati • Cleveland • Detroit • Los Angeles • New Orleans • Newark • New York • St. Louis
San Francisco • **IN CANADA:** The McArthur Chemical Co. (1958) Ltd., Montreal • **IN MEXICO:** Comsolmex, S.A., Mexico 7, D.F.

SUBJECT:	2-Nitropropane	**DESCRIPTION:**	Solvent for vinyl and epoxy coatings
ACTION DESIRED:	Consider 2-NP to achieve higher quality at lower cost		

General

2-NP ($CH_3CHNO_2CH_3$) is a member of the extraordinarily versatile CSC Nitroparaffin family. Its most outstanding characteristic is its unique solvent property which permits the use of larger proportions of low cost alcohols and aromatics in solubilizing a wide variety of coating materials, dyes, organic chemicals, fats, and oils. This unique property is of special interest in the formulation of vinyl and epoxy coatings.

Solvent for Vinyls

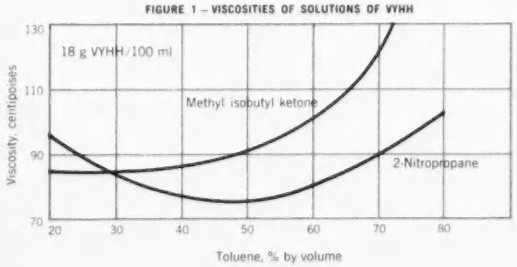
With the introduction of 2-NP – for the first time – formulators of vinyl chloride-acetate copolymers were able to obtain coatings with 1) lower viscosity and/or higher solids, 2) medium evaporation rate with better flow, 3) improved solvent release resulting in reduced drying time, and 4) mild odor. In addition to these advantages, the ability of nitrated solvents to displace water results in coatings with better adhesion to hydrophilic surfaces and better weathering properties due to improved dispersion. 2-NP's high flash point and low volatility provide added safety factors.

Research and field experience in the packaging industry has shown that the high solids content of 2-NP-formulated vinyls offers important advantages in the high-speed coating of food and beverage containers. 2-NP also proves useful in vinyl ink applications since it does not attack gelatin or most rubber rolls but still provides outstanding adhesion or "bite" to many plastics.

Low Viscosity and/or High Solids Content

2-NP can be formulated to give vinyl solutions of higher solids content and/or lower viscosity than any other medium evaporating solvent. A typical comparison is shown in Figure 1. In addition, 2-NP solutions have good stability and show no tendency to gel.

FIGURE 1 – VISCOSITIES OF SOLUTIONS OF VYHH



Evaporation Rate

The table below illustrates the desirable evaporation rate of 2-NP.

Evaporation Rate Of 2-NP Compared To Other Solvents (Volume)

Acetone	975
MEK	568
Toluol	197
MIBK	186
2-NP	110
n-Butyl Acetate	100
Xylol	69
Cellosolve	38
Isophorone	4.3

Although 2-NP has a slower evaporation rate than many solvents, it escapes from a vinyl film more rapidly than most of the faster solvents shown in the above chart, thus relieving problems of print resistance and residual odor.

Reduced Cost

To evaluate the economics of 2-NP in comparison with another medium evaporating solvent, such as MIBK, we should again refer to Figure 1. We note that in order to obtain comparable solids and viscosities in VYHH* solutions a 50-50 mixture of MIBK-toluol should be replaced by a 30-70 mixture of 2-NP-toluol. This makes it possible for a vinyl formulator to save over $600 in raw material costs for each tank car of MIBK he now uses, as evidenced by the following calculations:

8,000 gallons MIBK	=	$7,749.00
8,000 gallons toluol	=	2,000.00
16,000 gallons 50-50 mixture MIBK-toluol	=	$9,749.00
4,800 gallons 2-NP	=	$6,336.00
11,200 gallons toluol	=	2,800.00
16,000 gallons 30-70 mixture 2-NP-toluol	=	$9,136.00
	=	$ 613.00 Savings

Solvent for Epoxies

Solvent mixtures based on 2-NP have been found to be superior to other solvent systems for epoxy coatings cured at room temperature. Improvements brought about by the use of 2-NP include much greater chemical resistance, marked reduction in pinholing and water vapor permeability, minimized crawling and cratering, and improved adhesion.

*Bakelite

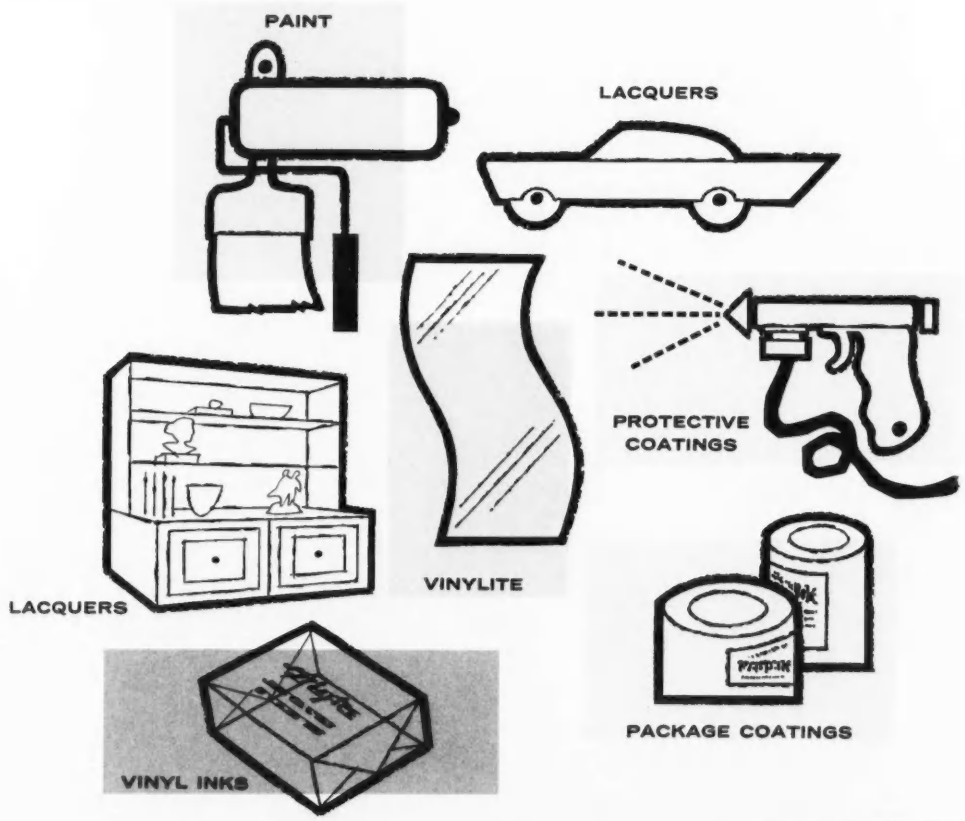
2-NP is compatible with amine catalyzed systems (with the exception of ethylene diamine) and systems employing urea-formaldehyde, polyamides, or phenolic cross linking agents.

As a rule of thumb, epoxy solvent systems formulated with 2-NP should contain an alcohol in an amount equal to the amount of 2-NP present. A solvent system containing equal parts of 2-NP, alcohol, and aromatic hydrocarbons is suggested as a starting formulation. Other systems can be used with very satisfactory results; however, a 2-NP concentration below 17% tends to minimize the advantages which can be obtained by its use. These advantages are available at no increase in cost since properly formulated solvent blends containing 2-NP are competitive in price with other solvent formulations. 2-NP has an ideal evaporation rate for spray systems and contributes the favorable flow properties that are indispensable for good finishes.

The ability of nitrated solvents to wet pigments and hydrophilic surfaces, as previously mentioned in the section entitled *Solvents for Vinyls*, also applies to epoxies as well as other vehicles used by the coating industry.

Want more information on 2-NP for Vinyls and Epoxies?

If you would like to have test samples and complete technical data on 2-Nitropropane for your vinyl and epoxy formulations, fill in and mail the coupon below. Or perhaps you would like to have one of our technical representatives look into your particular problem? If so, just mark the coupon accordingly, or drop us a note in the mail.



For samples, technical data, use this coupon

Nitroparaffins Department
COMMERCIAL SOLVENTS CORPORATION
260 Madison Avenue, New York 16, N. Y.

_____ Please send me samples and data on 2-NP for vinyl and epoxy coatings.

_____ Please have your technical representative get in touch with me.

*Name*_____ *Title*_____

*Company*_____

*Address*_____

*City*_____ *Zone*_____ *State*_____

PHYSICAL PROPERTIES OF 2-NITROPROPANE

FLASH POINTS (°F Tag Open Cup) of 2-NP Compared to Other Solvents

Acetone	16
MEK	30
Toluol	56
MIBK	81
Xylol	85
n-Butyl Acetate	92
2-NP	103
Cellosolve	126
Isophorone	202

Comparison of Lower Limit of Flammability of 2-NP With Other Solvents (% by volume in air)

MIBK	0.9
Xylol	1.0
Toluol	1.27
n-Butyl Acetate	1.7
MEK	1.8
Acetone	2.15
2-Nitropropane	2.6
Cellosolve	2.6

PHYSICAL PROPERTIES OF SOME VINYL SOLVENTS

	2-NITRO-PROPANE	NITRO-METHANE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE
Molecular Weight	89.09	61.04	72.10	100.16
Boiling Point, °C	120.3	101.2	79.6	116.0
Vapor Pressure at 20°C, mm	12.9	27.8	77.5	18.1
Specific Gravity at 20/20°C	0.992	1.139	0.806	0.802
Weight per Gallon at 68°F, lb.	8.24	9.48	6.72	6.68
Gallons per Pound at 68°F	0.121	0.105	0.149	0.150
Red Label Required	No	No	Yes	No
Heat of Vaporization at 30°C, cal/g	104	143.3	112.3	93.2
Solubility in Water at 20°C, % by volume	1.7	9.5	31.80	2.5
Solubility of Water in Solvent, % by volume	0.6	2.2	10.90	1.7

MOVES UP: D. W. Oakley, advanced to group vice-president for the chemicals, coatings and plating divisions of Metal & Thermit Corporation, New York.

Bayer Plans to Form A Unit in New York

Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, the century-old German company that is as modern as some of its products—aspirin, phenobarbital and the sulfonamides—has created a new unit, which will open up in New York City.

Name of the organization is FBA Pharmaceuticals, Inc., and its purpose will be to develop, manufacture and market ethical pharmaceutical speciaities. It will operate as an autonomous unit of Bayer.

Plans for establishment of research and manufacturing facilities are currently being formulated. The company's executive offices will be located at 120 East 56th street.

The projected American firm "plans to introduce several significant new therapeutic agents in 1962."

Helmut Raiser is president of FBA Pharmaceuticals. He had been managing director of Bayer Farmaceutica Argentina in Argentina from 1958 to 1961. The Argentine firm is one of the major units of the Bayer organization.

Lucidol Research Center Is Opened in Buffalo, N. Y.

The Lucidol Division of Wallace & Tiernan, Inc., has opened its new research center in Buffalo, N. Y. At dedication ceremonies last week, Dr. Clifford C. Furnas, chancellor of the University of Buffalo, highlighted the occasion with a talk titled "The Next 100 Years Brought Up to Date."

The new $750,000 building houses five laboratory sections, consisting of analytical cal research, applications research, new product research, product and process development, technical service and quality control.

Lucidol is reportedly the leading producer and supplier of organic peroxides in the US.

Rubber Industry Pushed In Program of Red Chinese

Next year the Red Chinese will need 2.5 times more automobile tires, 2.7 times more bicycle tires, 3.7 times more conveyor belts and 40 percent more rubber footwear than in 1958. Typically, the country doesn't report what 1958 demand was for these items.

However, Mao Tse-Tung's militant minions are forging ahead in the rubber

—*Continued on page 54*

Canada's Idea for the Future: Import Fewer Finished Products, And That Includes Chemicals

Canadians are out to close the "fabrication gap" in their industrial picture. What this means is that our northern neighbors would like to import fewer finished products and replace them with imports of raw materials for fabrication on the local scene. These trade objectives are spelled out in a current report of the Ontario Department of Planning & Development—and chemicals figure prominently in the report.

Industrial growth and full employment can only be accomplished in Ontario by fabricating "more made-in-Canada goods" that will replace imported goods and employ Canadian labor, the report says.

Imports Point Up a Need

In 1959, Canada's total imports amounted to $5.7 billion, an increase of nearly 9 percent over 1958, it is noted. Of this total, 78 percent were fully manufactured products, "indicating a need for producers to more closely examine Canadian industry's fabrication gaps."

Chemical imports rose a whopping 20 percent—from $212.8 million in '58 to $253.5 million in '59.

A look at the chemical import list reveals a strong emphasis on finished products or next-to-the-last step materials:

Imports of pharmaceuticals in 1959 rose to $80.4 million from only $63 million the year before. Despite the country's great petrochemical potential, imports of synthetic resins ran to $26.2 million in '59.

Imports of fully manufactured plastics in '59 were valued at $23.7 million, up from $20.3 million, while imports of molded plastics in basic shapes totaled $10.6 million, up from $9.7 million.

A second report from the Ontario agency lists total US chemical imports in 1959 and gives Canada's share of the total. Following are selected items from the list, with the Canadian share shown in parenthesis:

Benzene, $13.8 million ($1.4 million); phenolic and synthetic resins, $2.5 million ($.9 million); vinyl acetate, $6.7 million ($6.5 million); sodium sulfate, $2.5 million ($.8 million); sodium cyanide, $2.5 million ($.8 million); acetylene black, $1.3 million, (all Canadian); miscellaneous chemical compounds "other than alcohols," $31.5 million, ($15.3 million); ammonium nitrate and mixtures, $15.9 million ($10.1 million); ammonium phosphates for fertilizers, $13.6 million (all Canadian).

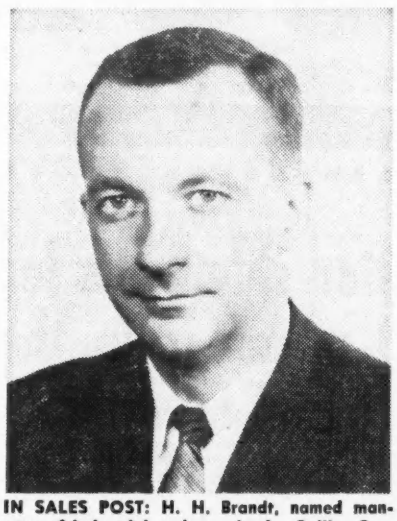
Areas where Canada is now enjoying only a small share of its potential include such US imports as phthalic anhydride, acetanilide, coaltar medicinals, trichloroethylene, vinyl alcohol and chloroacetic acid.

Columbian Sells Off Rights To Rubber-Blacking Device

Columbian Carbon Company, New York, and Chemicolloid Laboratories, Inc., Garden City Park, N.Y., have entered into an agreement through which Chemicolloid has obtained the manufacturing and sales rights for the carbon company's specially-designed apparatus, currently in use in their black rubber process.

Now known as the "Monroe Mixer," the Chemicolloid-manufactured machine will have its first public showing at that company's exhibit at the National Exposition of Chemical Industries, November 27 through December 1, 1961, in New York.

Columbian Carbon Company is a leading producer of carbon black, pigments, dispersions of black and printing inks. Chemicolloid Laboratories, Inc., has been engaged for many years in the manufacture of the Charlotte Colloid Mill for effecting homogenization and similar operations.



IN SALES POST: H. H. Brandt, named manager of industrial carbon sales by Collier Carbon & Chemical Corporation, Los Angeles.

Flotation Plant Ready To Open in Early '62

Minerals & Chemicals Philipp Corporation, Menlo Park, N. J., is all set to open a new $2 million plant in McIntyre, Ga., early in 1962. The plant is being built to put into use an ultra-flotation process the company has developed for upgrading minerals and ores and securing greater yields per ton.

The unit will be a multi-ton per hour plant and the method will be open to licensing. The process was originally developed by Dr. Ernest W. Greene, assistant director of research of Minerals & Chemicals Philipp, along with James B. Duke and Joseph L. Hunter. The process, it is believed, can be adapted to recovering commercial quantities of various metallic and non-metallic substances from waste tailings now dumped at mine sites.

An example is phosphate in which, for every ten pounds mined, six are sold and four go into tailing ponds; in Florida alone, Dr. Greene said, phosphate dumped is estimated at some 5 million tons a year. It is believed the process can also be applied to low-grade bauxite, low grade Me-

—*Continued on page 52*

NARD Names Simmons To Fill Dargavel's Posts

Willard B. Simmons has been appointed secretary, executive secretary and general manager of National Association of Retail Druggists by the association's executive committee. He fills the unexpired term of John W. Dargavel, who passed away October 9.

In accepting the new position, Mr. Simmons resigned from the executive committee, of which he has been chairman. He served on the committee since 1953 and he joined the official family of NARD in 1950 as fifth vice-president.

Chemical Selling Is Made Tougher By FTC Ruling

As if the selling of chemicals weren't tough enough already, industry marketers now have to contend with a new complication: a major ruling on price discrimination handed down by Federal Trade Commission last week.

In a 4-to-1 decision against Sunshine Biscuits, Inc., Long Island City, N.Y., FTC ruled that discriminatory price reductions are illegal when used to obtain new customers but not when granted in good faith to retain old customers.

The FTC majority opinion by Commissioner Sigurd Anderson held that sellers charged with discriminating in price among their customers in violation of section 2(a) of the Robinson-Patman law can validly use "good faith meeting of competition" defense provided in section 2(b) only where the preferential price cuts are offered in self-defense against competitive price attacks.

Defense Not Allowed for New Business

Holding that this defense is not available to Sunshine in those cases where it gave discriminatory discounts to get new business, the commission ordered the company to stop charging different prices to competing resellers of its potato chips and other grocery products.

Commissioner Philip Elman dissented, asserting that neither the statute itself nor prior decisions require a distinction between "aggressive" and "defensive" price reductions and that FTC should not make such a distinction because it is "practically unworkable" and "economically unsound."

The commission's complaint of December 22, 1959, challenged pricing differentials by Sunshine on sales of its "Krum-Chee" potato chips in the Cleveland, Ohio, area.

The company admitted that four customers were granted discounts of 5 percent plus another 2 percent, fifteen received a 5 percent discount and other competing retailers were not given any discount.

It also admitted that these price differentials may injure competition between recipients and non-recipients of the discounts, but relied on the defense afforded sellers under section 2(b) of the law.

According to FTC, the evidence shows that Sunshine sometimes had to give these lower prices to prevent loss of customers

—*Continued on page 31*

NAC Meeting Plans Set; Ferguson, Ribicoff to Talk

Dr. George R. Ferguson, president of Geigy Agricultural Chemicals, a division of Geigy Chemical Corporation, will deliver the opening address at National Agricultural Chemicals Association's twenty-eighth annual meeting to be held in Hot Springs, Va., October 29-November 1.

Another feature will be the October 31 address of Abraham Ribicoff, Secretary of Health, Education & Welfare.

Talks by government and consumer group representatives will cover "The Extension Entomologist--A Public Relations Agent," "Chemicals and Food—The Woman's Angle," and "Chemicals and Wildlife Management."

Chalk Plant Starts Up

The calcium products division of Georgia Marble Company has begun operations at its new plant in Adams, Mass. The facility is producing both wet and dry ground calcium carbonate pigments and fillers for the paint, rubber, plastic and other chemical industries. It also includes a quarry in close proximity from which stone for the plant will be secured.

Flu Vaccine Producers Are Operating in High Gear

Influenza vaccine producers are operating in high gear, turning out, perhaps, three or four times as much material as they had anticipated earlier.

One major drug house expected to begin shipments of additional lots over the weekend. Another says it will have additional material available by early November, prior to any expected outbreaks of flu.

All suppliers apparently saw during the summer that greater public awareness of the effectiveness of the vaccines, plus predictions by public health authorities of above-normal incidence of flu this winter, would upset previous production plans.

Pharmaceutical Manufacturers Association points out that intricacies of vaccine production require at least three months "in the pipelines" before finished vaccines can be delivered.

PMA also notes that, unlike many products, the vaccines must be administered relatively soon after production and cannot be stockpiled or held over from year to year.

Eli Lilly & Co., Indianapolis, Ind., reports it already has shipped more flu vaccine this fall than in the July-December period of last year.

Merck Sharp & Dohme Division of Merck & Co., West Point, Pa., says it is now producing vaccines originally scheduled for three months hence, and that its total 1961 production may be three to four times higher than in 1960.

Parke, Davis & Co., Detroit, Mich., and the other firms emphasize that all shipments of the vaccines will be allocated in accordance with orders from normal local distribution sources.

Meeting Dates
May Be Found
On Page 32

SAVE MONEY on SOLVENTS

Order in combination shipments for bulk and carload prices from the only complete line of solvents—
11 ALCOHOLS—15 ESTERS
11 GLYCOL-ETHERS—11 KETONES

METHYL ISOBUTYL KETONE

14.5¢ lb. TANKS, frt. alld.

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METHYL ETHYL KETONE

12.5¢ lb. TANKS, frt. alld.

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PRICE LIST FOR ALL YOUR SOLVENT NEEDS

		Tanks*	PRICE Dms. C.L.	Dms. L.C.L.	Terms of Shipment
ALCOHOLS					
Butanol	lb.	.155	.18	.195	frt. alld.
2-Ethylhexanol	lb.	.18	.205	.22	frt. alld. (East Terr.)
2-Ethyl Butanol	lb.	.28	.30	.3075	f.o.b. Shipping Point
Hexanol	lb.	.33	.35	.3575	f.o.b. SP
Isobutanol	lb.	.13	.155	.17	frt. alld.
Isopropanol, 91%	gal.	.42	.58	.68	frt. alld.
Isopropanol, Anhydrous	gal.	.46	.62	.72	frt. alld.
Methanol	gal.	.30 gal.	.515	.615	frt. alld. (East Terr.)
Methanol	gal.	.29 gal.			f.o.b. SP
Methyl Amyl Alcohol	lb.	.145	.17	.185	frt. alld.
Primary Amyl Alcohol	lb.	.1775	.2025	.2175	frt. alld.
Propanol	lb.	.115	.14	.155	frt. alld.
Proprietary Solvent †SYNASOL Solvent	gal.	.56	.72	.83 (Under 950 gal.) .77 (Over 950 gal.)	frt. alld.
KETONES					
Acetone	lb.	.07	.095	.11	frt. alld.
Diacetone Alcohol, AF Grade	lb.	.13	.155	.17	frt. alld.
Diisobutyl Ketone	lb.	.145	.17	.185	frt. alld.
Ethyl Butyl Ketone	lb.	.34	.36	.3675	f.o.b. SP
Isobutyl Heptyl Ketone		.2725	.2925	.30	f.o.b. SP
Isophorone	lb.	.225	.25	.265	frt. alld. (East Terr.)
Mesityl Oxide	lb.	.125	.15	.165	frt. alld.
Methyl Acetone, syn.	gal.	.445	.605	.705	frt. alld. (East Terr.)
Methyl Ethyl Ketone	lb.	.125	.15	.165	frt. alld.
Methyl Isoamyl Ketone	lb.	.175	.20	.215	frt. alld.
Methyl Isobutyl Ketone	lb.	.145	.17	.185	frt. alld.
ESTERS					
Butyl Acetate	lb.	.145	.17	.185	frt. alld.
Butyl CARBITOL Acetate	lb.	.2875	.3075	.315	f.o.b. SP
Butyl CELLOSOLVE Acetate	lb.	.195	.22	.235	frt. alld. (East Terr.)
CARBITOL Acetate	lb.	.2525	.2725	.28	f.o.b. SP
CELLOSOLVE Acetate	lb.	.17	.195	.21	frt. alld. (East Terr.)
2-Ethylhexyl Acetate	lb.	.345	.37	.385	frt. alld. (East Terr.)
Ethyl Acetate 85-90%	lb.	.125	.15	.165	frt. alld.
Glycol Diacetate	lb.	.30	.32	.3275	frt. alld.
Isobutyl Acetate	lb.	.1275	.1525	.1675	frt. alld.
Isopropyl Acetate	lb.	.115	.14	.155	frt. alld.
Methyl Amyl Acetate	lb.	.145	.17	.185	frt. alld. (East Terr.)
Methyl CELLOSOLVE Acetate	lb.	.27	.29	.2975	f.o.b. SP
Primary Amyl Acetate	lb.	.165	.19	.205	frt. alld.
Propyl Acetate	lb.	.1225	.1475	.1625	frt. alld.
Tetraethyl Osthosilicate	lb.		.65	.665	frt. alld.
GLYCOL-ETHERS					
Butoxy Ethoxy Propanol	lb.	.1925	.2125	.22	f.o.b. SP
Butyl CARBITOL	lb.	.2825	.3075	.3225	frt. alld. (East Terr.)
Butyl CELLOSOLVE	lb.	.195	.22	.235	frt. alld. (East Terr.)
CARBITOL Solvent	lb.	.20	.225	.24	frt. alld. (East Terr.)
CELLOSOLVE Solvent	lb.	.185	.21	.225	frt. alld. (East Terr.)
Hexyl CELLOSOLVE	lb.	.4725	.4925	.50	f.o.b. SP
Methyl CARBITOL	lb.	.185	.21	.225	frt. alld. (East Terr.)
Methyl CELLOSOLVE	lb.	.185	.21	.225	frt. alld. (East Terr.)
Phenyl CELLOSOLVE	lb.			.75	f.o.b. SP
UCAR Solvent LM	lb.	.185	.21	.225	frt. alld. (East Terr.)
UCAR Solvent 2LM	lb.	.195	.22	.235	frt. alld. (East Terr.)

* Tanks—4,000 gal. minimum—Prices effective as of date of publication.
† For shipment in the states of Washington, Oregon, Idaho and Montana, a differential of 5 cents per gallon should be added.

FOR A PRICE QUOTATION, write, wire, or phone your nearest CARBIDE office, or Union Carbide Chemicals Company, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, New York.

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UNION CARBIDE CHEMICALS

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, October 20 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low many be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, ens ..... lb. 1.90 - 3.40
Acacia (see Arabic gum).
Acetaldehyde, 99%, dms., c.l., frt. alld. lb. .12 - —
dms., l.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld ..... lb. .10 - —
Acetaldehyde prices 1c. higher in West.
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs. ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms., any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, coml., or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
glacial, syn., CP, dms., c.l., divd. E 100 lbs. 18.75 - —
tech., dms., c.l., divd. E. 100 lbs. 13.75 - —
dms., l.c.l., divd. E.. 100 lbs. 15.25 - —
tanks, divd. E ..... 100 lbs. 10.00 - —
USP, tanks, divd. E ... 100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., divd. E lb. .16½- —
aluminum ret dms., l.c.l., divd E. lb. .18 - —
tanks, divd E lb. .14 - —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib. dms., c.l., divd lb. .70 - —
fib. dms., l.c.l., divd ..... lb .71½- —
Acetoacet-o-chloroanilide, fib. dms., c.l., divd lb. 1.25 - —
fib. dms., l.c.l., divd ..... lb. 1.26 - —
Acetoacet-o-toluidide, fib. dms., c.l., divd lb. .73 - —
fib. dms., l.c.l., divd ..... lb. .74½- —
Acetone, CP, dms., c.l., divd.. lb. .09½- —
dms., l.c.l., divd..... lb. .11 - —
tanks, divd. ..... lb. .07 - —
Acetonitrile, dms., c.l., frt. alld. lb. .37½- —
dms., l.c.l., frt. alld ..... lb. .39 - —
tanks, frt. alld ..... lb. .35 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld. lb. 1.20 - —
100-lb dms., 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, ens., dms ..... lb. .42 - 1.30
Tech., dms., c.l., works..... lb. .32½- —
dms., l.c.l., works ..... lb. .34 - —
tanks, works ..... lb. .30 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis.. lb. 1.40 - —
dms., 100-lb. lots, same basis.... lb. 1.54 - —
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 - —
cs., l.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (80 mesh), 250-lb. dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 450-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb. higher.) Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver..lb. .37 - —

ACIDS
Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .36 - —
dms., l.c.l., works..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., divd lb. .42½- —
dms., l.c.l., l.t.l., divd..... lb. .43½- —
tanks, divd. ..... lb. .40 - —
tech., esterification, tanks, frt. alld. lb. .38 - —
tech., polymerization, tanks, same basis .lb. .38 - —

Abies Siberica Oil—Ammonium Biborate

Acrylonitrile, dms., c.l., t.l., works lb. .17½- —
dms., l.c.l., l.t.l., same basis .... lb. .18½- —
tanks, same basis ..... lb. .14½- —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., divd..... lb. .29 - —
bgs., l.c.l., divd. ..... lb. .31¾- —
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis .. lb. 10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. divd lb. .99 - —
fib. dms., l.c.l., divd..... lb. 1.04 - —

ALCOHOLS
Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., divd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c. higher W. of Rockies
Allethrin, 90%, dms., frt. alld lb. 28.80 - 28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. divd..... lb. .32½- —
dms., t.c.l., divd..... lb. .34 - —
tanks, divd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,950 lbs. works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs. works. lb. 1.60 - —
Allyl chloride, dms., c.l., divd... lb. .17½- —
dms., t.c.l., divd..... lb. .19 - —
tanks, divd. ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).

Abbreviations
Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	divd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
		equald.	equalized	pf.	proof
a.p.a.	available phosphoric acid	exp.	expressed	phos.	phosphate
		Ext.	external	photo.	photographic
approx.	approximately	F.	fahrenheit	pkgs.	packages
artif.	artificial	ferment.	fermentation	powd.	powdered
ASTM	American Society for Testing Materials	f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
		fib.	fiber	pt.	point
Atl.	Atlantic	f.o.b.	free on board	pulv.	pulverized
Be.	Baume	f.p.a.	free of prussic acid	purif.	purified
bbls.	barrels	frt.	freight	redist.	redistilled
bgs.	bags	gal.	gallon	refd.	refined
bls.	bales	gran.	granular	refy.	refinery
bots.	bottles	grd.	ground	reg.	regular
b.p.	boiling point	i.&a.	iron and aluminum	resub.	resublimed
b.p.l.	bone phosphate of lime			ret.	returnable
b.r.	boiling range	i.b.p.	initial boiling point	SD	specially denatured
bxs.	boxes	imp.	imported	s.d.	single distilled
C.	centigrade	incl.	included	S E.	southeast
cbys.	carboys	indust.	industrial	sec.	secondary
CD	completely denatured	kgs.	kegs	secs	seconds
		l-	laevo	s.g.	specific gravity
c.i.f.	cost, insurance, freight	lacq.	lacquer	shipt.	shipment
		lb.	pound	soln.	solution
cks.	casks	l.c.l.	less carlots	s.u.	standard unit
c.l.	carlots	l.t.l.	less truckload	syn.	synthetic
cns.	cans	liq.	liquid	tanks.	railroad tankcars
coml.	commercial	mfrs.	manufacturers	tech.	technical
conc.	concentrated	m-	meta	tert-	tertiary
CP	chemically pure	m.a.p.	mixed aniline point	t.l.	truckloads
cps.	centipoises			t.w.	tankwagons
cryst.	crystalline	min.	minimum	USP	U S Pharmacopoeia
cs.	cases	m.p.	melting point		
ctns.	cartons	N-	nitrogen	vis.	viscosity
cyls.	cylinders	n-	normal	VM&P	varnish makers & painters
d-	dextro	nat.	natural		
dbl.	double	neut	neutral	W.	west
denat.	denatured	NF	National Formulary	whse.	warehouse
dest-dist.	destructively—distilled	NNR	New and Nonofficial Remedies	w w	water-white
dl-	dextro-laevo				
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb 2.75 - 3.40
NF, bots. ..... lb 3.00 - 3.30
sweet, USP, cns., dms..... lb .60 - .70
Aloe, Cape, cs. ..... lb. 35 - .40
powd. cs. ..... lb 60 - .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —
Aloin, USP, bbls., dms., kgs..... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., c.l., works..100 lbs. 4.80 - —
Lump, dms., works..... 100 lbs. 5.55 - —
Powd., dms., works..... 100 lbs. 5.70 - —
Alum potassium, gran., bgs., c.l., works..100 lbs. 5.05 - —
Lump, dms., works..... 100 lbs. 5.80 - —
Powd., dms., works..... 100 lbs. 5.95 - —
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0530- —
bgs., l.c.l., works..... lb. .0655- .0830
Aluminum acetate, basic, fib. dms., l.c.l., works .lb. .54 - —
Aluminum chloride coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l., works 100 lbs. 21.00 - —
dms., l.c.l., works 100 lbs. 21.50 - —
Soln., 32° cbys., c.l., works lb. .0495- —
cbys., l.c.l., works lb. .0570- .1095
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works lb. .31 - .32
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l., basis 80% .... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l., works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495- —
bulk, c.l., same basis..... lb. .0330- —
Light, bgs., c.l., t.l., works..... lb. .08 - —
bgs., t.l., to c.l., works..... lb. .09 - —
bgs., l.t.l., works ..... lb. .10 - —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79¼- —
gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb. lots, frt. alld lb. .2610- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .24 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste lining, extra-fine, 200-lb. dm., divd lb. .70 - —
Standard lining, dms ..... lb. .47½- —
Aluminum powder, lining, extra-fine, 250-lb. dm., divd lb. 1.12 - —
Standard lining, dms ..... lb. .82 - —
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton 41.00 - —
bulk, c.l., same basis ton 40.00 - —
lump, bgs., c.l., same basis ton 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 6.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 - 10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb 1.72 —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb 2.15 - 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb 3.00 —
Aminoethyl ethanolamine, dms., c.l., divd lb. .475 - —
dms., t.c.l., divd ..... lb. .49 - —
tanks, divd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., t.c.l., frt. alld..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb 2.05 - —
dms. smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.25 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald, E. of Rockies ton 92.00 - —
refrigeration, tanks, works, frt equald. E. of Rockies ton 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies ton 95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs 8.25 —
bgs. l.c.l., same basis 100 lbs. 8.65 - 12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works lb 1.90 - —
Ammonium biborate, gran., dms., cl., works ton 323 - —
dms., ton lots, ex whse 100 lbs. 22.86 - —
dms., smaller lots, ex whse 100 lbs. 24.11 - —

Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works 100 lbs. 9.50 - —
Ammonium bichromate dms. works lb .42 .43
Ammonium bifluoride dms. dlvd lb. 21 45- .22 45
Ammonium bromide, NF gran., dms., c.l. t.l. frt equald lb. .44 - —
dms. l.c.l. same basis lb .48 - —
Ammonium carbonate USP lump, dms c.l lb 15½- —
Ammonium chloride, white tech., fine gran. bgs. c.l. works 100 lbs 6.00 —
bgs. l.c.l. works 100 lbs 6.00 8.45
USP, gran., 250-lb. dm lb. .20 - —
Ammonium citrate dibasic 250-lb dm f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech. 200-lb. dm., f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous)
Ammonium iodide NF, 25-lb. jar, f.o.b. works lb. 4.51 - —
Ammonium lauryl sulfate, dms., c.l., frt alld lb. 20½- —
dms. t.t.l. frt. alld lb .21½- —
tanks frt alld lb. 19½- —
Ammonium lignin sulfonate, bgs., bgs, l.c.l., works 100 lbs. 3.75 - 4.25
bgs. l.c.l., works 100 lbs. 3.40 3.65

Ammonium linoleate, 80%, dms., works lb. .50 - .85
Ammonium molybdate, CP, cryst., 400 lb dms. 15,000-lbs works. lb. 1.35 - —
400-lb dms., 2,000-lb. contracts, work lb. 1.36 - —
400-lb dms. works lb. 1.37 - —
Ammonium nitrate, dom., fertilizer grade. 33 5% N. bgs., f.o.b. works ton.67.00 - —
dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.44.00 - —
Imp. Canadian, 33.5% N eastern, bgs., c.l., ship't point frt. equald to $3 ton base price ton.67.00 - —
Ammonium oxalate, tech., fine gran., 250-lb dm, f.o.b works E lb. .28½- —
Tech., powd. 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.15.27 - —
bgs., smaller lots, ex whse 100 lbs.16.52 -18.52
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —

Ammonium phosphate, dibasic, NF., V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¾
Ammonium sulfamate, bgs. c.l., t.l., works lb. .19 —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk f.o.b works, base price ton.32.00 - —
Purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Ammonium sulfate, large granular, bulk, c.l. works ton.35.00 - —
bgs. c.l., works ton 40 00 - —
Tech., bulk, c.l., t.l., works ton 52 00 - —
bgs., c.l., t.l., works ton 56 00 - —
bgs., l.c.l. t.l. works 100 lbs 3.20 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald. 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate, tech., cryst. dms. c.l. works lb. .20 - —
dms. l.c.l., works lb. .22 .26
Tech, soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, comi., 55-gal. dms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb 4.50 - 6.00
d-Amphetamine phosphate, 6b dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb 4.20 - 5.60
d-Amphetamine sulfate, 6b. dms. lb.15.00 -17.00

dl-Amphetamine sulfate, 6b. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld E of Rockies lb. .18½- .19.,
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
Tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks dlvd lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., c.l. dlvd. lb. .20½- —
tanks, dlvd lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132° C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Primary, dms., c.l., frt. alld. lb. .20¼- —
dms., l.c.l., frt. alld. lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld E. lb. .14½- —
1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .28 - —
dms., l.c.l., works lb. .29 - —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms. lb. 1.40 - 1.50
Anethol tech., dms. lb. .80 - .92
USP cns. dms. lb. 1.05 - —
Angelica root, bls lb. .50 - 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120 00 -130.00
Aniline, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l. t.l., 20,000 lbs min., frt. alld lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms lb. 1.90 - 3.00
Anise seed, Turkish, bgs. lb. .24 - —
Spanish, bgs. lb. .34 - —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l. same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b. works lb. .42½- —
dms. l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99% 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt alld lb. .70 - —
bbls., l.c.l., same basis lb. .73 - —
Electrical grade, bgs. l.c.l. same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .32½- —
cs., c.l., mines lb. .33 - —
Antimony oxide, bgs., c.l., frt. alld, lb. .30 - —
bgs., l.c.l., frt. alld lb. .31½- —
Prices of antimony oxide are 2c. higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 —
bgs., smaller lots, dlvd lb. .24 .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .44½- —
pails, l.c.l., works lb. .46½- —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb dm. same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd., bbls lb. .18 - .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine free base, dms., 10-kilo 5-kilo lots or more kilo.60.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 - —
l-Arginine monohydrochloride, dms., 5-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07¼
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .38 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.80 00 - —
7D, c.l (30 tons), mines ton.75 00 - —
7F, c.l (30 tons), mines ton.71 00 - —
7H, c.l (30 tons), mines ton.61 00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF c.l (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF c.l. (30 tons) mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP dms., 100-kilos kilo. 5.60 - —
dms., less than 100-kilos kilo. 5.85 - —
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 - —

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★ *Ethyl Acetate* ★ *Isoamyl Alcohol* ★ *Amyl Acetate*
★ *Butyl Alcohol* ★ *Acetone* ★ *Refined Fusel Oil*
★ *Butyl Acetate* ★ *Acetaldehyde* ★ *Proprietary Solvent*
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Asphalt, petroleum, cut-back, tanks, tank-wagon, refy..gal. .09½- —
emulsion, tanks, tankwagon, refy, gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy...ton.21.00 • —
85-300 penetration, tanks, tankwagon, refy ton.20.00 • —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins.....oz. Nom.
Atropine sulfate, USP, bots, 10 oz. lots..oz. 5.25 • —
Azelaic acid, bgs., c.l., dlvd.....lb. .37 • —
bgs., ton lots, same basis.....lb. .38 • —

B

Bacitracin, sterile, over 500,000,000 units 50,000 units. .90 • —
non-sterile, over 500,000,000 units, 50,000 units. .65 • —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 • —
Barbital sodium, NF, 100-lb dms. lb. 4.75 • —
Barium carbonate, precip., bgs., c.l., works ton.111.50 • —
bgs., smaller lots, works ton.126.50 • —
Barium chlorate, dms., works lb. .32 • .41
Barium chloride anhyd., bgs., c.l., works ton.176.00 • —
bgs., t.c.l., works ton.196.00 • —
NF, cryst., dms., 400-lbs., works.lb. .23 • —
Tech., cryst., bgs. c.l., works. 100 lbs. 7.00 • —
bgs., t.c.l. works 100 lbs. 8.00 • —
Barium chromate, bgs. frt. equald. lb. .38 • —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 • —
bgs., t.c.l., t.l., frt equald ton.218.00 • —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 • —
bgs., t.c.l., frt. equald 100 lbs.11.75 • —
Barium monoxide (see Barium oxide).
Barium nitrate bbls. c.l., t.l. dlvd lb. .16 • —
bbls., t.c.l., t.l., dlvd. lb. .17 • —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 • —
dms. t.c.l., t.l. frt equald ton.285.00 • —
Barium peroxide, dms. frt. equald. lb .20 • —
Barium stearate, ctns. c.l. frt alld. lb. .41 • —
ctns., t.c.l. same basis lb. .42 .46
Barium sulfate, tech (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb dm. lb. .19 • —
Barium sulfide, dms., c.l., works. ton.100.00 • —
dms., t.c.l., works ton.110.00 • —
Barytes, southern off-color, bgs. mines ton 30.00 • —
95-75%, bgs., mines ton.30.00 • —
white, water-grd paper bgs. c.l. St. Louis ton.60.00 -60.25
paper bgs. ex whse New York ton 84.85 • —
Battery acid, cbys., c.l., works E. 100 lbs 2.35 —
cbys, t.c.l., works, E .... 100 lbs. 2.65 -10.95
Bauxite, bulk, mines .... ton 7.00 -10.00
Bay oil NF Puerto Rican 50-55% cns lb. 3.75 • —
NF, Dominica, 50-55%, cns., dms lb. 3.60 • 4.50
Bayberry wax, bgs lb. .65 • .70
Beeswax, crude, African, bgs....lb. .53 • .54
Brazilian, bgs. .....lb. .57 • .58
Central American, bgs .....lb. .55 • .56
Chilean, bgs. .....lb. .59 Nom.
Refd USP bleached white, bricks 100-lb ctns lb. .67 • .69
white, slabs, 100-lb ctns lb. .66 • .68
yellow, bricks, 100-lb. ctns lb. .60 • .62
yellow, slabs, 100-lb. ctns. lb. .59 • .61
Belladonna leaf, bls .....lb. .25 • .30
Belladonna root, bls .....lb. .35 • .38
Bentonite, dom 200 mesh, bgs., c.l., mines ton.14.00 • —
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 • —
bgs., 1-ton lots, ex whse ton.99.00 • —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 • —
bgs., 1-ton lots ex whse ton.97.16 • —
Benzal chloride, cbys., works lb. .44 • —
Benzaldehyde, NF, dms. .....lb. .74 • —
Tech., dms., c.l., t.l. .....lb. .42 • —
dms., t.c.l .....lb. .44 • —
Benzene, industrial or nitration, tanks, works:
Baton Rouge, La. ....gal. .31 • —
Bethlehem, Pa .....gal. .31 • —
Birmingham district..gal. .31 • —
Chicago district .....gal. .31 • —
Cleveland district ....gal. .31 • —
Geneva, Utah .....gal. .31 • —
Houston, Tex. .....gal. .31 • —
Johnstown, Pa. .....gal. .31 • —
Lackawanna, N. Y. ...gal. .31 • —
Lone Star, Tex. .....gal. .31 • —
Lorain, Ohio .....gal. .31 • —
Mennequa, Colo. .....gal. .31 • —
Middletown, Ohio ....gal. .31 • —
Philadelphia district..gal. .31 • —
Pittsburgh district ...gal. .31 • —
Port Arthur, Tex. ....gal. .31 • —
St. Louis, Mo. District gal. .31 • —
Sparrows Point, Md. ..gal. .31 • —
Syracuse, N. Y. .....gal. .31 • —
Terre Haute, Ind. ....gal. .31 • —
Youngstown, Ohio ....gal. .31 • —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit, .0073- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit, .0073- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 • —
bbls., t.c.l., same basis lb. 1.21 • —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 • —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 • —
AAOT, bbls., dlvd. .....lb. 2.55 • —
Lightfast, bbls., dlvd. .....lb. 3.40 • —
Benzocaine, dms. 100-lbs., frt alld. lb. 3.25 • —
Benzoic acid, tech., dms., c.l., t.l., frt. alld. lb. .20 • —
dms., t.c.l., t.t.l., same basis lb. .24 • —
Benzoic acid in bags, ½c. lower.
USP, bbls., dms., ton lots lb. .48 • —
bbls., dms., 1,000-lb lots lb. .50 • —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra cs. lb. .32 • —
Benzophenone, dms lb. 1.35 - 1.46
Benzotriazole, tech dms 1,000-lb lots, works lb. 1.95 • —

Benzotrichloride, cbys., 1,000-lb lots or more, frt. equald.lb. .21 • —
cbys., smaller lots, frt. equald..lb. .23 • —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald. lb. .22 • —
cbys., t.c.l., same basis lb. .23 • —
tanktrucks, dlvd. Metropolitan area lb. .21 • —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .54 • —
Benzyl alcohol, NF, dms. .....lb. .54 • —
Tech., dms., dlvd. .....lb. .47½- .65
Benzyl benzoate, USP, 40-lb. dms.lb. .62 • —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 • —
dms., t.c.l., same basis .....lb. .24 • —
tanktrucks, dlvd., Metropolitan area lb. .21 • —
Benzyl cinnamate, cns .....lb. 3.80 - 4.00
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 • —
12-49 dms., same basis.....lb. 1.35 • —
1-11 dms., same basis.....lb. 1.90 • —
Benzyl formate, cns. .....lb. 1.70 - 1.85
Benzyl isoeugenol, cns.....lb. 8.20 - 8.30
Benzyl propionate, bots.....lb. 1.30 - 1.35
Benzyl salicylate, bots .....lb. 1.50 - 1.85
Benzylidine acetone, bots .....lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns ....lb 56.50 • —
Berberine hydrochloride, bots....lb.56.50 • —
Bergamot oil, nat., NF, Italian, cns. lb.11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphtol).
Betanaphthylamine (see b-Naphthylamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin cryst., bots .....gram.10.00 • —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns.....lb. 1.50 - 1.90
Rectified, cns. .....lb. 1.75 - 2.00
Bismuth chloride, jars .....lb. 5.11 —
Bismuth hydroxide, dms .....lb. 4.60 - 4.65
Bismuth metal, bxs, ton lots lb. 2.25 • —
Bismuth nitrate, cryst., 200-lb. dm. lb. 2.25 • —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.92 • —
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works lb. 3.70 • —
Bismuth subgallate, NF, 200-lb. dm. f.o.b. works lb. 3.98 • —
Bismuth subiodide, fib dms lb. 5.37 • —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b., works lb. 3.10 • —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.13 • —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 • —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 • —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .30½- —
bgs., c.l., t.l., less than 70,000-lbs., same basis..lb. .31 • —
bgs., t.c.l., same basis .....lb. .32½- —
Blackberry root bark, bls.....lb. .50 .55

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton.160.00 —
bgs., t.c.l., works .... ton.170.00 • —
bgs., t.c.l., New York whse ton.215.00 • —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton 5.50 • —
Bloodroot, bls. .....lb. .80 • .85

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms..lb. 1.90 • —
Peruvian, dms. lb. 1.65 • —
BON acid maroons, pure, bbls lb. 1.75 • —
Resinated bbls lb 1.50 • —
Bonemeal, steamed, works, E ton.100.00 —
Bone black, dms., c.l., frt. alld lb .1750- .2225
t.c.l., works .... lb .1950- .2425
Pacific coast bone black prices 3¼c. per lb. higher.
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).

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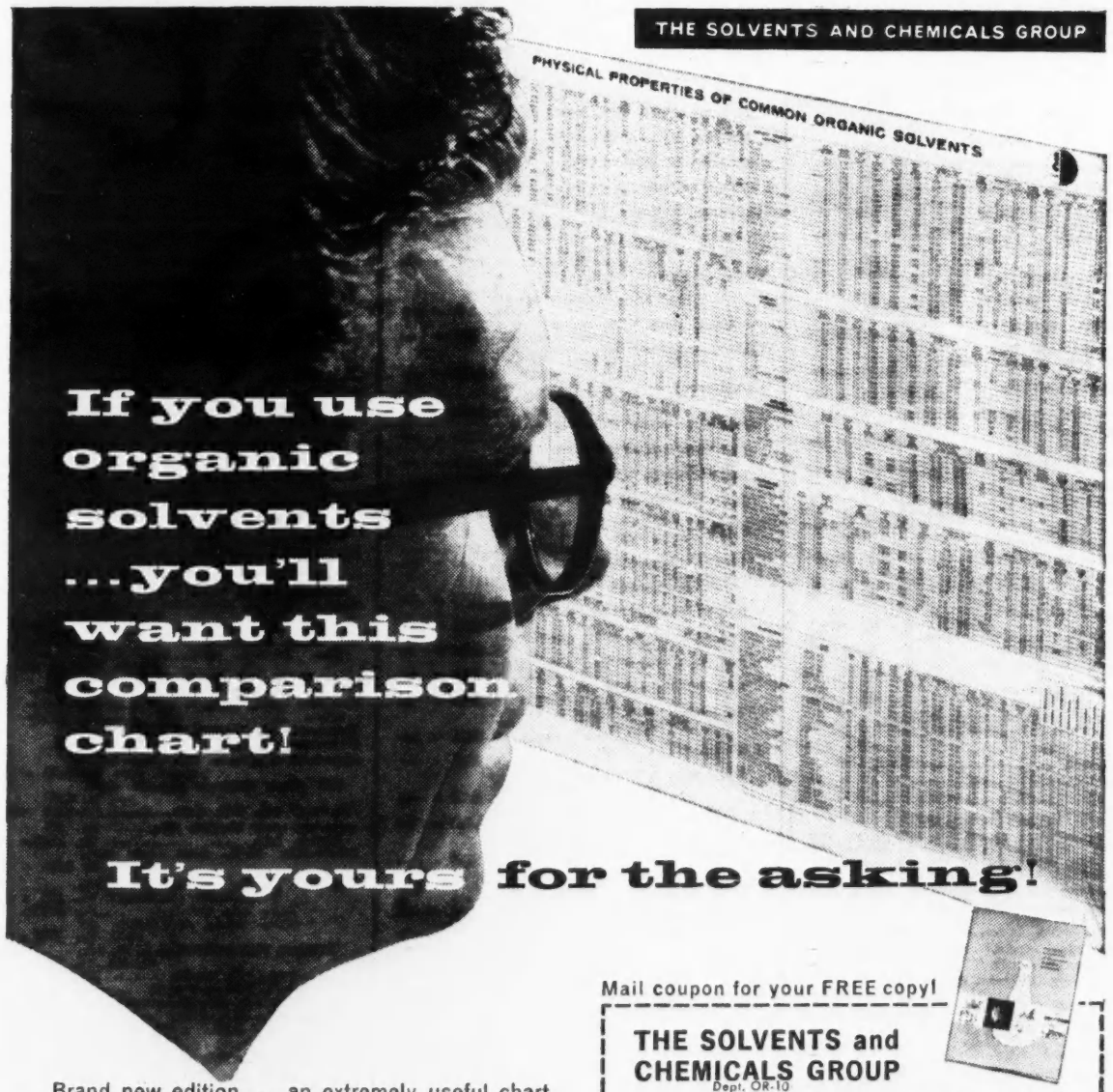
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Kansas City, Missouri Solvents & Chemicals Co., CH 1-3223
La Crosse, Wisconsin Solvents & Chemicals Co., LCRS 2-3011
Los Angeles, Central Solv. & Chem. Co., (Cal.), UN 4-7711 or SP 3-3471
Louisville, Dixie Solvents & Chemicals Co., EM 8-5828
Milwaukee, Wisconsin Solvents & Chemicals Co., GR 6-2630
New Orleans, Southern Solvents & Chemicals Corp., VE 3-4666
Rochester, Buffalo Solvents & Chemicals Corp., LO 2-5980
St. Louis, Missouri Solvents & Chemicals Co., GA 1-3495
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Bone phosphate, precip (see Calcium phosphate, tribasic)
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.67 - —
bgs., smaller lots, same basis, 100 lbs. 8.91 -10.91
bulk c.l. works ton 83.00 —
Tech., gran., decanydrate, 99½%, bgs., c.l., works ton.50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.31 - —
bgs., smaller lots, same basis 100 lbs. 6.56 - 8.56
bulk c.l., works ton 43.50 —
Tech., pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.12 - —
bgs., smaller lots, same basis 100 lbs. 7.37 - 9.37
bulk, c.l., works ton.58.00 —
USP powd., bgs., c.l., works ton.54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.57 - —
bgs., smaller lots, same basis 100 lbs. 7.82 - 9.82
Bordeaux powder tribasic bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.21.27 - —
Tech, anhyd., 99%, bgs., smaller lots, same basis 100 lbs.22.52 -24.52
cryst. 99.9% bgs. c.l. works. ton.163.50 - —
Tech., cryst., 99.9%, bgs., ton lots, ex whse., New York or Chicago 100 lbs.11.67 - —
bgs., smaller lots, same basis, 100 lbs.12.92 -14.92
Tech., cryst., 99.9%, dms., c.l., works tin.188.50 - —
dms., ton lots, ex whse., New York or Chicago 100 lbs.13.17 - —
dms., smaller lots, same basis 100 lbs.14.42 - —
gran., 99.9%, bgs., c.l., works. ton.112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.78 - —
bgs., smaller lots, same basis 100 lbs.10.03 -12.03
dms., c.l., works ton.137.00 —
dms., ton lots, ex whse, New York or Chicago 100 lbs.10.29 - —
dms., smaller lots, same basis 100 lbs.11.54 - —
bulk, c.l. works ton.106.00 - —
powd., bgs., ton lots, ex whse, New York or Chicago 100 lbs. 9.20 - —
bgs., smaller lots, same basis 100 lbs.10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs.10.71 - —
dms., smaller lots, same basis 100 lbs.11.96 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb. cyls. works lb 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. 70 - —
cyls., l.t.l., works lb. 70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls lb 1.53 - —
Bromine, purif., cs. c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis .21½ —
Bromochloromethane dms., c.l., frt. equald lb. 48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. 47 - —
Bromoform, pharmaceutical grade, 5-gal, cby., frt. equald lb 1.95 - —
Bromstyrol, bots lb 5.25 5.35
Brucine, cns. oz. 1.10 - —
Brucine sulfate, NF, cns. oz. .85 - —
Buchu leaves, bbls lb. .60 - .65

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example prices on Brown iron oxide, may be found in the l's under Iron oxide brown.

Butadiene refd cyls. c.l., refy lb 21 —
cyls., l.c.l., refy lb .22 —
tanks, dlvd lb .12¾ —
Butene-1 tanks works lb .0625 —
Butene-2 tanks works lb. .0570 —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ —
tanks same basis lb. .14½ —
Syn., dms., c.l., dvld. E lb. .17 - —
dms., l.c.l. same basis lb. .18½ —
tanks same basis lb. .14½ —
sec-Butyl acetate, syn. dms., c.l., dlvd E lb. .14¾ —
dms., l.c.l., same basis lb. .16¼ —
tanks, same basis lb. .12¼ —
n-Butyl acrylate, dms. c.l. or t.l., straight or mixed frt., alld. E lb. .37½ —
dms., l.t.l., same basis lb. .38¼ —
tanks, same basis lb. .35 - —
n-Butyl alcohol, terment, dms., c.l., frt. alld lb. .18 - —
dms., l.c.l. frt. alld lb. .19½ —
tanks, frt. alld lb. .15½ —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., frt., alld lb. .19½ —
tanks, frt. alld lb. .15½ —
Sec-synthetic dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ —
tanks dlvd lb. .12½ —
Tert-synthetic, dms., c.l., frt. alld., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½ —
tanks, same basis lb. .13½ —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms., c.l., works lb. .37½ —
dms., l.c.l. works lb. .38¼ —
n-Butyl ether dms., c.l., works lb. .35¼ —
dms., l.c.l., works lb. .36 - —
tanks, works lb .33¼ —
Butyl lactate dms. c.l. frt. alld E. Rockies lb. .42½ —
dms., l.c.l., same basis lb. .43½ —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
cms. l.c.l., works lb. .55½ —
Butyl oleate, dms., c.l., frt. alld lb. .26 - —
dms., l.c.l., frt. alld lb. .26½ .27
Butyl phenylacetate dms lb 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).

Butyl stearate, CP, dms., c.l., frt. alld. E. of Rockies lb. .28½ - —
dms., l.c.l., frt. alld. E. of Rockies lb. .29 - .29¾
tech., dms., c.l., same basis lb. .25¾ - —
dms., l.c.l., same basis lb. .26¼ - .26¾
Butylamine (see Mono-, Di- and Tri-butylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½ - —
tc., t.t., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd. lb 4.75 - —
6-tert-Butyl m cresol (see Mono-tert-butyl-m cresol)
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p cresol)
1,3-Butylene glycol, dms. c.l., t.l., dlvd lb. .20½ - —
dms., l.c.l., t.t.l., f.o.b. works lb. .22 - —
tanks, dlvd lb. .18 - —
p-tert-Butylphenol, bgs., c.l., frt. alld lb. .25½ - —
bgs., l.c.l., same basis lb. .26½ - —
tanks, same basis lb. .23½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 —
dms., l.c.l., dlvd. lb. .23½ - —
tanks, dlvd lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 - —
dms., l.c.l., same basis lb. 43 - —
n-Butyronitrile, dms., c.l., dlvd lb. .56½ - —
dms., l.c.l., dlvd. lb. .57½ - —
tanks, dlvd. lb. .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt alld E of Rockies lb 5.55 - —
Light shade, bbls same basis lb 4.65 - —
Medium shade, bbls., same basis. lb. 5.30 - —
Medium, light shade, bbls., same basis. lb 4.90 - —
Orange-red shade, bbls same basis lb 4.30 - —
Yellow, all shades, bbls, frt alld E. of Rockies lb. 3.02 - —
Cadmium chloride, 400-lb dms., f.o.b. shipping point lb. 1.56½ - —
Cadmium iodide, 25-lb tin dms in c/c 4.75 4.00
Cadmium metal, ingots or sticks, ton lots, cs. dlvd lb. 1.60 - —
Cadmium nitrate, purif cryst. 400-lb. dms., less than 5,000 lbs., f.o.b shipping point. lb. .94 - —
400-lb. dms., 5,000 lbs. or more, same basis lb. .90 - —
Cadmium-mercury lithopone orange, deep shade bbls frt alld E. of Rockies lb. 1.73 - —
Cadmium-mercury lithopone red, dark shade, bbls same Basis lb. 2.03 - —
Red, light shade bbls. same basis lb. 1.80 - —
Red, medium shade, bbls same basis lb. 1.95 - —
Red, medium light shade, obls same basis lb. 1.88 - —
Red, maroon shade, obls same basis lb. 2.11 - —
Cadmium-selenide lithopone maroon, bbls., frt alld E of Rockies lb. 2.84 - —
Orange, bbls., same basis lb. 1.66 - —
Cadmium-selenide lithopone red, orange-red shade bbls. same basis lb. 1.80 - —
Red, dark shade, bbls. same basis lb. 2.64 - —
Red, light shade, bbls. same basis lb. 1.96 - —
Red, medium shade, bbls. same basis lb. 2.31 - —
Red, medium-light shade bbls. same basis lb. 2.08 - —
Cadmium-selenide, lithopone, yellow, all shades bbls frt alld E. of Rockies lb. 1.27 - —
Caffeine, NF, citrated dms 100 lb lots or more lb 2.70 - —
USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld lb. 2.25 - —
hydrous, powd., 150-lb. dms., frt. alld lb. 2.25 - —
USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld lb. 2.40 - —
Cajuput oil, native, cns. lb 1.75 2.00
Redist. USP cns lb 1.90 2.10
Calamine USP dms. lb .34 —
Calamus oil bots lb 12.00 20.00
Calciferol, cryst., 10 kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Vitamin D).
Calcium p-aminosalicylate trihydrate fib dms 100 lbs or more frt adjusted lb 3.10 - —
Calcium bromide NF tars 100 lbs. or more lb 1.10 - —
Calcium carbide standard generator size, 600-lb dms c.l., dlvd ton.149.00 - —
Calcium carbonate, nat., dry grd., air floated, 325 mesh, bgs. c.l. works ton 10.50 —
Chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l. works ton.30.00 —
10 to 30 microns bgs., c.l., works ton 17.00 -18.00
Precip., dense, bgs., c.l., works. ton.30.00 -38.50
bgs. l.c.l., works ton 45.00 53.50
medium bgs c.l., works ton 38.00 —
bgs., l.c.l works ton 48.00 -53.00
Surface treated, bgs., c.l., works. ton.42.00 -44.00
bgs., l.c.l., works ton 57.00 59.00
ultrafine, bgs. c.l. works ton 117.50 167.50
bgs. l.c.l. works ton 137.50 187.50
Calcium chloride conc flake or pellet 94-97% paper bgs., c.l. works. frt equald ton.39.30 - —
Flake, 77-80% paper bgs., c.l., works. frt equald ton.32.00 - —
Liquor, 40% tanks frt equald ton.12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton.38.00 - —
Purif., gran dms lb .27 —
Solid, 73-75%, dms., c.l., frt. equald ton.30.50 - —
dms., l.c.l. works frt equald ton.36.00 -73.00
USP, gran., dms. lb .32 —
Calcium chromate, bgs., dlvd lb .37 - —
Calcium cyclamate, 100-lb dms lb 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb dm. ton lb. 73½ - —
USP powd 100-lb dm ton lb. 66½ - —
Calcium hydride, lump dms. works. lb 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs.27.50 - —
100-lb. dms., same basis dm.39.50 - —
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —
Calcium iodide, 25-lb. jars, works lb. 4.27 - —
Calcium lactate, NF, dms., f.o.b. works lb. .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, USP, 1 kilo or more kilo.20.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs. 8.25 - —
Feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton.81.00 - —
bgs. c.l., t.l., f.o.b. Texas City works ton 75.50 - —
Feed grade, 21% P., bgs., c.l., t.l., frt. equald ton.97.65 - —
bgs., l.c.l. frt equald ton.107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs. l.c.l. frt. equald 100 lbs.10.00 - —
Calcium propionate, any quantity, dms., dlvd E. of Rockies. lb. .34½ - —
Prices W of Rockies 3c. per lb more.
Calcium phytate, bgs., 50 lbs. or more f.o.b. warehouse N Y lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .45 - —
Calcium silicate hydrated, bgs., c.l., works lb. .06½ - —
bgs., l.c.l., works lb. .07 - —
Calcium silicate paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l lb. .40 - .44
Calomel, NF mild, powd. dms., 100-lbs., f.o.b. works lb. 4.32 - —
NF mild. precip., dms., 100-lbs., f.o.b works lb. 5.67 - —
Camphene 46° m.p., dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l. same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Camphene chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 3.70
Camphor, syn. tech., 1 bbl. or more. lb. .45 - —
USP, powd., bbls., 1,000-lb. lots lb. .56 - —
bbls., smaller lots lb. .57 - —
tablets, ctns., 1,000-lb. lots. lb. .80 - —
ctns., 500-lb. lots lb. .81 - —
ctns., smaller lots lb. .82 - —
Camphor oil, sassafrassy, dms. lb. .32 - .50
White, dms. lb. .24 - .40
Canauga oil native, cns. lb 5.00 6.50
Rectified cns. lb 7.25 -10.00
Candelilla wax, crude, bgs. lb. .57 - .59
Refd., pure, bgs. lb. .61 - .63
Powdered Candelilla wax 20 to 100 mesh. 8c higher.
Cantharides, Chinese, cs. lb. 1.00 - —
powd., bgs. lb 1.15 - —
Russian bgs. lb 2.00 2.15
powd., bgs. lb 2.15 2.30
Capric acid, dms lb. .27¼ - .29¾
tanks lb. .24¾ - —
Caprolactam monomer, flake, bgs., c.l., t.l., f.o.b. frt. equald. lb. .49 - —
bgs., l.c.l., l.t.l., same basis lb. .54 - —
molten, tanks, same basis lb. .46 - .462
Caprylic alcohol 85% dms., c.l., t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½ - —
tanks, frt. equald. lb. .16½ - —
Sec. 92-99% dms., c.l., f.o.b. works lb. .22 - —
dms. l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b works lb. .19½ - —
Caprylic acid, dms lb. .27¼ - .29¾
tanks lb. .24¾ - —
Capsicum (see Pepper red)
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin NF, from dom. pepper, dms lb 4.00 - —
NF, from African pepper, dms. lb 4.50 —
Caraway oil, NF, dms lb. 4.25 - 4.50
Caraway seed Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .16¼ - —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber, beads, bulk, c.l. works lb. .08 - —
bgs., c.l., works lb. .08½ - —
bgs., l.c.l., ex whse. or dlvd lb. .16¼ - —
Furnace, fast extruding, bulk, c.l., works lb. .06¼ - —
bgs., c.l., works lb. .06¾ - —
bgs., l.c.l., ex whse lb. .13½ - —
high abrasion, bulk, c.l., works lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs., l.c.l., dlvd. or ex whse lb. .14½ - —
Carbon black, high medulus, bulk, c.l., works lb. .05¾ - —
bgs., c.l., works lb. .06¼ - —
bgs., l.c.l., ex whse lb. .13 - —
semi-reinforcing, bulk, c.l., works lb. .05¼ - —
bgs., c.l., works lb. .05¾ - —
bgs., ctns., l.c.l. ex whse lb. .12½ - —
pigment, high color beads, bgs., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or ex whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½ - —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton.60.00 -115.00
bulk, 3,000,000 lbs or more, dlvd Metropolitan areas, E ton.55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms. l.c.l., same basis lb. .086 - .091
5-gal dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, f.o.b. works lb. .0450- —
Carbon tetrachloride CP consumers, dms., c.l., frt. alld. lb. .12¾ - —
dms., l.c.l., frt alld. lb. .15¼ - —
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾ - —
dms., l.c.l. t.l.t. frt. alld lb. .14¼ - —
tanks frt alld lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots lb.40.00 -43.00
Cardamom seed, bleached "A" lb. 3.20 - —
Bleached "B" lb. 3.10 - —
Decorticated Alleppey, cs. lb. 2.60 - —
Guatemala, cs. lb. 2.60 - —
Green, Alleppey, bgs. lb. 1.95 - —
Ceylon, bgs. lb. 2.00 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb.16.80 - —
bulk, smaller lots, dlvd. lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots. lb. .56 - .58
North Country, No. 2, crude, bgs., ton lots lb. .64 - .65
refd., pure, ton lots lb. .72 - .74
North Country, No. 3, Ceara, crude, ton lots lb. .56 - .58
North Country, No. 3, Parnahyba, crude, ton lots lb. .58 - .60
No. 3, refd., pure, bgs., ton lots. lb. .64 - .66
No. 1, Ceara, yellow, bgs., ton lots. lb. .86 - .88
Parnahyba, yellow, bgs., ton lots. lb. .88 - .90
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech. 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½ - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, semi-solid suspension 400,000 A units per gram cns kilo.57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo.72.00 - —
b-Carotene, pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns kilo240.00 - —
Carvol, bots. lb. 5.00 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom. edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more works lb. .56 - —
80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaport lb. .18½ - .19¼
Australian, bgs., c.l., same basis lb. .20 - .20½
New Zealand, same basis lb. .24 - .25
Cashewnut shell liquid treated, dms. c.l., Newark, N.J lb. .24 - —
dms. ton lots, same basis lb. .25 - —
t.w., same basis lb. .22½ - —
Cassella acid dms. frt. alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, cns. lb. 6.50 - 8.00
Cassia, Padang, "A," bls. lb. .28½ - —
"B," bls. lb. .27½ - —
"C," bls. lb. .25½ - —
Korintje "A," bls. lb. .27½ - —
"B," bls. lb. .26½ - —
"C," bls. lb. .25¼ - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms. l.c.l. lb. .2650- —
dehydrated, bodied, dms., c.l. lb. .2710- —
dms., l.c.l. lb. .2760- —
tanks lb. .2510- —
dehydrated, unbodied, dms., c.l., lb. .2560- —
dms., l.c.l. lb. .2660- —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2425- —
bgs., ton lots lb. .2825- —
bgs., l.c.l., dlvd lb. .3025- —
raw, No. 1, dms., c.l. lb. .2200- —
dms., l.c.l. lb. .2300- —
tanks lb. .2000- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l. lb. .2225- —
tanks lb. .1925- —
Castor oil, refd., dcod., dms., c.l lb. .2650- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
USP, dms., c.l. lb. .2550- —
dms., l.c.l lb. .2650- —
tanks lb. .2150- —
Imported, No. 1, Braz., tanks, New York lb. .16½ - —
No. 3, tanks, same basis lb. .16 - —
Sulfonated, 50%, dms., works lb. .15 - .15¼
75%, dms works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .41¼ - .43¼
Split, dms. lb. .33¾ - .34¾
Castor pomace, bgs., c.l., works ton.35.00 - —
Castoreum nat., cns. lb 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½ - —
Resub., dms. works lb 4.29½ - —
Catnip leaves, Southern, bls lb. Nominal.
Caustic potash (see Potash caustic)
Caustic soda (see Soda caustic)
Cedarleaf oil USP XIII cns., dms lb. 3.30 - 3.50
Cedarwood oil, cns., dms. lb. 1.10 - 1.25
Celery seed oil lb.12.00 - —
Celery seed, French, bgs. lb. .35 - —
Indian, bgs. lb. .26 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .36 - .51
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
27% butyryl content, bgs dlvd, E lb. .595 605
38% butyryl content, bgs., dlvd, E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E. lb. .545 - .555
50% butyryl content, ngs. dlvd, E lb .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works frt alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
standard, low or medium vis., bgs., c.l., t.l., frt. alld. E lb. .57 - —
bgs., ton lots, frt. alld. E lb. .59 - —
(Cellulose gum prices 1c. per lb. higher in west.)
Cerium hydrate 74% CeO, fib. dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib dms., 100-lb lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. lb 1.85 1.90
bgs., smaller lots, dlvd. lb 2.15 —
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E lb .41½ —
fib cns., l.c.l., same basis lb. .43½ —
tanks same basis lb .39 —
Extra, cns., c.l., t.l., dlvd. E lb. .48½ —
fib cns. l.c.l., same basis lb. .50½ —
tanks, same basis lb. .46 —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb. .95 - 1.10
Roman, cs. lb. 1.75 - 2.00
Chamomile oil, blue Hungarian bots lb 350.00 —

NOW READILY AVAILABLE IN QUANTITY

CELLASE™ 1000

Wallerstein's Cellulose-Degrading Enzyme

Cellase 1000 is a potent purified enzyme preparation of uniform cellulolytic activity now available to manufacturers of pharmaceuticals and food supplements. Standardized at 1000 WCU (**W**allerstein **C**ellulase **U**nits), Cellase 1000 offers the possibility of control of a long neglected phase of human nutrition: **the digestion of vegetable matter high in fiber and roughage.**

A Fungal Enzyme of a New Type

Cellase 1000 is derived from a specially grown strain of *Aspergillus niger.* Chemically it is a highly purified enzyme capable of depolymerizing cellulosic polysaccharides of high molecular weight into fragments of low molecular weight. The exact constitution and nutritional utility of the hydrolysis products depend on many factors, including the type and state of the cellulose initially acted upon.

Some Interesting Uses of Cellase 1000

Aside from the management of geriatric disorders in a progressively aging population, Cellase 1000 can find uses in the correction of dyspepsia, flatulence, certain nutritional insufficiencies, and other GI disturbances of highly contemporary importance. Because Cellase 1000 facilitates the digestion of cabbage, cucumbers, and other "difficult" vegetables, its use for people who have trouble with these foods will allow greater cellulose bulk intake and a concomitant decrease in calorific starches. The implications for the regulation of obesity are plain.

A Pharmaceutically Elegant Enzyme

The whitish color and minimal odor of Cellase 1000 insure its palatability and acceptability in your products, while its high potency and low bulk allow you to formulate smaller and more attractive capsules and tablets than have heretofore been possible. Cellase 1000 is eminently suitable for combination with Mylase® 100 and Prolase® 300, Wallerstein's purified amylase and protease. Further, Cellase 1000 is compatible with most active ingredients. adjuvants and vehicles normally employed in digestive aids and nutritional supplements.

Get in touch with Gerry Gray for samples and your copy of Data Sheet 630 on Cellase 1000.

WALLERSTEIN COMPANY *Division of Baxter Laboratories, Inc.*
Staten Island 3, New York Gibraltar 2-6400
Wallerstein Manufactures Enzymes, Antibiotics and Chemicals for Industry

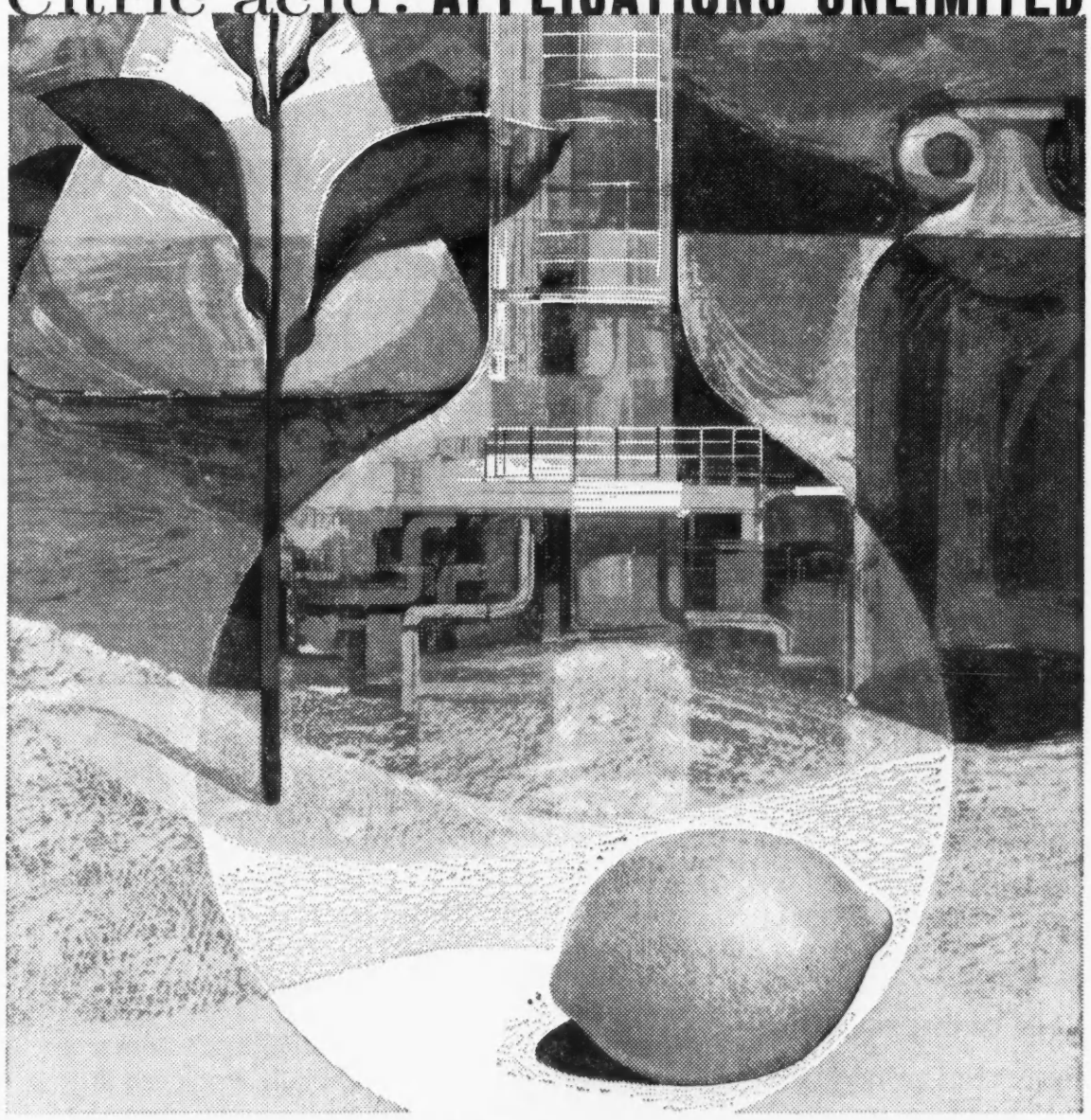
Charcoal, activated NF, fib, dms., c.l., works lb. .34 • —
fib, dms., 5-ton lots, works lb. .35 • .35½
fib dms., smaller lots, works lb. .36 • .59
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk c.l., f.o.b plant ton 55.00 • —
briquets, bulk, c.l., f.o.b plant ton 80.00 • —
5-lb paper bgs., c.l., same basis ton 106.00 • —
20-lb paper bgs, c.l., f.o.b. plant, ton 90.00 • —
40-lb paper bgs c.l. same basis ton 86.00 • —
Chenopodium oil, NF, cns lb. 4.70 • 4.90
Chicago acid paste bbls, frt alld, lb 3.21 • —
Chinawood oil (see Tung oil).
Chloral hydrate, USP jars, 1,000-lb lots lb. 1.00 • —
jars, 500-lb lots lb 1.03 • —
jars, 100-lb. lots or less lb 1.05 • —

Chlordan, agricultural, dms., c.l., frt. alld lb. .65 • —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb. .66 • —
clarified, dms., c.l., frt. alld lb. .69 • —
dms. l.c.l. 5,000-10,000-lb. lots, frt. alld lb. .70 • —
Chlorinated paraffin, 40%., dms., c.l., frt. alld lb. .15 • —
dms., l.c.l., 10 dms. or more, same basis lb. .16 • —
70%, dms., c.l., same basis lb. .18½ • —
dms. l.c.l. 10 dms. or more, same basis lb. .19½ • —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 • —
ctns., l.c.l., works lb. .61 • —
125 cps. ctns. c.l., works lb. .70 • —
300 cps. ctns., c.l., works lb. .80 • —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 • —
cyls., l.c.l., Metropolitan area, same basis lb. .12½ • .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 • —
tanks, multiple units, 5 cars, works, frt. equald, same basis 100 lbs. 4.15 • —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 • —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 • 5.85
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 • 7.25

Chloroacetic acid, mono, flake, 99%, purif., dms., c.l lb. .23½ • .25½
dms., l.c.l. lb. .24½ • —
Tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 • —
dms., l.c.l., frt. equald lb. .20 • —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 • —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 • —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 • —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 • —
dms., l.c.l., same basis lb. .77 • —
tanks, same basis lb. .73 • —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 • —
dms., l.c.l., same basis lb. .54 • —
tanks, same basis lb. .50 • —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 • —
dms., l.c.l., same basis lb. .79 • —
o-Chlorobenzaldehyde, dms., t.t., works lb. 1.05 • —
dms., t.t.l., same basis lb. 1.20 • —
o-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 • —
o-Chlorobenzoic acid, fib. dms., t.t., works lb. 1.10 • —
fib. dms., smaller lots, works lb. 1.25 • —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 • —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 • —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 • —
dms., l.c.l., same basis lb. .19 • —
tanks, same basis lb. .17 • —
USP, dms., c.l., dlvd lb. .27 • —
dms., l.c.l., dlvd. lb. .30 • —
tanks, minimum 4,000 gals. dlvd. lb. .25 • —

2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .90 • —
Powd., dlvd. E., 100% basis lb. 1.00 • —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 • —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 • —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 • —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .25 • —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l., same basis lb. .38 • —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l., same basis lb. .38 • —
Chloropicrin, coml., cyls., 180 lbs., frt alld lb 1.07 • —
cyls., 100 lbs., same basis lb 1.08 • —
cyls., 50 lbs., same basis lb 1.14 • —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465 • —
dms., l.c.l., frt. equald lb. .0515 • —
tanks, frt. equald lb. .0415 • —
Chlorosulfonic acid, in stainless steel dms. ½c per lb higher
o-Chlorotoluene, tech., dms., t.t., works lb. .37 • —
dms., l.c.l., t.t.l., same basis lb. .38 • —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 • —
Choline chloride, 100-lb dms., frt. equald lb. 1.25 • —
Choline dihydrogen citrate, 100-lb. dms., frt. equald lb. 1.25 • —
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls, dlvd E of Rockies. lb. .43 • —
blue content, 16-30%, bbls., same basis lb. .44 • —
41-45%, bbls., same basis, lb. .44 • —
blue content, 45-49%, bbls., same basis lb. .45 • —
reduced color 25%, bbls., same basis lb. .20 • —
Chrome green prices 1c higher W of Rockies.
Chrome orange CP bbls., dlvd E of Rockies lb. .35 • —
Chrome orange prices 1c higher W of Rockies.
Chrome yellow CP bbls., dlvd E. of Rockies lb. .35 • —
Chrome yellow price 1c higher W of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½ • —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works. lb. .10 • —
Chromium fluoride bbls, works lb. .51 .52
Chromium oxide, hydrated, bbls., fib dms. c.l. frt alld. lb. 1.20 • —
Pure, bgs., c.l., frt alld lb. .44½ • —
bgs. l.c.l. same basis lb. .45¼ • —
Chromium trioxide NF bots lb. 1.15 —
Cinchona bark NF red, broken, bgs lb .25 • —
NF yellow broken bgs lb. .35 .40
Cinnamic acid refd., bots lb. 2.50 3.50
Cinnamic alcohol bots lb. 1.50 1.60
Cinnamic aldehyde dms. lb. .80 1.00
Cinnamon, Ceylon, No. 2, bgs. lb. .55 • —
Ceylon, No. "0000," bgs. lb. .64 • —
Cinnamon bark oil, bots lb. 5.00 • 7.00
Cinnamon leaf oil, crude, dms lb 1.60 2.00
USP (Cassia), cns., dms lb 8.50 • 13.50
Citral, CP, bots lb. 4.65 • 5.55
Extra, bots lb. 5.00 • 7.25
Syn., dms. lb. 6.10 • 6.65
Citric acid USP anhyd., fine gran., bgs. dms., c.l lb. .29½ .30
bgs. dms. 10,000-lb lots, 1 shipt lb. .30 .30⅛
bgs., dms., smaller lots lb. .30½ .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½ .28⅛
bgs. dms., 10,000-lb lots, 1 shipt lb. .28 .28⅛
bgs. dms. smaller lots lb. .29 .29⅛
Powdered citric acid ½c. per lb higher
Citronella oil, Ceylon, dms. lb. 1.05 • —
Formosan, dms. lb. 1.05 • —
Citronellol, bots, dms. lb 1.90 2.50
Synthetic, dms. lb. 1.70 • —
Civet, artif., bots lb. 13.75 • 15.00
Nat. bots oz 8.50 • 15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton. 17.50 • 21.50
crushed shed moisture, bulk, c.l., Tenn ton 8.00 • 11.25
Imp. airfloated, bgs., c.l., Atl port net-ton 43.00 • 47.00
lump, bulk, Atl port net-ton 31.50 • 37.50
Clay, China, dom., dry-grd, air floated, 99%, 325 mesh. Georgia bgs., c.l., works ton. 11.00 • 17.00
Georgia bgs. l.c.l. works ton. 13.50 • 22.50
Imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton 23.00 • 25.00
white, powd. bgs. c.l. ex dock net-ton 50.00 • —
bgs. l.c.l. ex whse net-ton 60.00 • 70.00
Cleaner's naphtha, petroleum, 105° F Flash, tankcars New Jersey and New York gal. 18 —
Group 3 gal. .1267½ —
Houston, Texas gal. .145 —
140 F. Flash, tankcars, New Jersey or New York gal. .205 • —
Group 3 gal. .154 • —
Houston Texas gal. .17 • —
Cleve's acid tech. mixed, solid, dms. frt. alld lb. 1.05 • —
1.6, tech. solid dms frt. alld lb .77 • —
1.7 tech., dms frt allll. lb 2.42 • —
Clove bud oil, USP, dms. lb. 2.55 • —
Cloves, Madagascar, bgs. lb. .38 • .38⅛
Zanzibar, bgs. lb. .39 • .42
Clove leaf oil, crude, dms lb. 1.10 • —
CMC, crude, 96.4% low or medium vis bgs., 23,000 lbs., dlvd. E., 100% basis lb. .40 • —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 • .46
65% low or medium vis. bgs., c.l., dlvd. E. 100% basis lb. .40 • —
l.c.l., dlvd E., 100% basis lb. .42 • 1.00
CMC, purif. high vis. (see Cellulose gum).
CMC prices W. of the Rockies are ½c. per lb. higher and are on a dlvd. basis.
Coaltar, crude resale for soln., tanks, works gal. .17 —
Refd., resale, indust., dms., c.l., ex whse gal. .35 • —
dms., l.c.l., ex whse gal. .39 • —
tanks works gal. 20½ • —
Coaltar pitch, aluminum, bulk, Works ton. 42.00 • —
Carbon, bulk works ton. 42.00 • —
Indust., bulk, works ton. 44.00 • —
Core bulk works ton 40.50 • —
Fiber, bulk works ton 48.00 • —
Roofing, 140-155 F., Federal Specification RP-381 Type 1 tanks, works ton. 41.00 • —
Cobalt acetate, 23.6% Co dms. dlvd lb 1.04 • —

Citric acid: APPLICATIONS UNLIMITED



FROM SOFT DRINKS TO HARD SCALE, versatile citric acid serves dozens of industries. The Miles-pioneered deep-fermentation process yields exceptionally pure citric acid that meets your most demanding purity and mesh specifications. Food uses include flavor enhancement, pH adjustment, color protection. Pharmaceutical uses cover effervescent products, lotions, hair rinses. Industrial applications range from secondary oil recovery to rust and scale removal. Miles offers abundant warehouse supplies, prompt delivery. Write for new 28-page technical bulletin.

Miles Chemical Company
DIVISION OF MILES LABORATORIES, INC.,
ELKHART, INDIANA

General Sales Offices: Elkhart, Ind., COngress 4-3111; Clifton, N. J., PRescott 9-4776; New York, N.Y., MUrray Hill 2-7970 29-60

Cobalt blue, genuine, 250 lb. bbls., dlvd. E of Rockies lb. 4.90 - —
Cobalt blue prices lc. higher W. of Rockies
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .44 - —
Cobalt metal, 98% dms., f.o.b. carrier lb. 1.50 - —
Cobalt naphthenate liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co., bbls., dlvd. lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R. lb. 1.15 - —
70-71% Co kgs. same basis lb. 1.12 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb. 1.35 - —
Cobalt resinate, fused 3% Co., dms lb. .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate 6% Co., dms. dlvd. lb. .44 - —
Cocaine, USP cns., 100-oz. lots, f.o.b. works oz. 17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots f.o.b. works oz. 13.75 - —
Cocillana bark, bls. lb. .20 - .22
Cocoa butter, bgs. lb. .58 - .63
Coconut oil, crude, tanks, New York. lb. .12⅜- —
tanks, Pac. coast lb. .11 - —
refined, deod., dms. lb. .18 - .19
Coconut acid, oil, dist., dms. lb. .21½- .24
tanks lb. .19 - —
double dist. (stripped), dms. lb. .22½- .25
tanks lb. .20 - —
Cod oil, dms., spot lb. .08½- .08⅝
Codeine, NF, cns., 100-oz. lots, oz. 13.25 - —
Codeine hydrochloride cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. gal 1.40 - 1.70
Cohosh root, black, bls. lb. .20 - .25
Blue, bls. lb. .20 - .25
Colchicine, USP, bots. 27.50 - 29.00
Colchicum root, bls. lb. .35 - .45
Colchicum seed, bgs. lb. .85 - .90
Collodion, USP, dms. lb. .32½- —
USP flexible, dms. lb. .34 - —
Colocynth pulp, bls. lb. .75 - —
Colombo root, bls. lb. .16 - .18
Conurango bark, bls. lb. .18 - .20
Congo copal gum, No. 1, bgs. lb. .26 - .27
No. 2, bgs. lb. .30 - .35
No. 3, bgs. lb. .22 - .25
Copaiba balsam, cns., dms. lb. .85 - .93
Copaiba oil, cns. lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, dark dense, c.l., works lb. .3545- —
bgs., l.c.l., works lb. .3695- —
Copper chloride, cupric, anhyd., dms., works lb. .44½- .45
cryst., dihydrate, dms., works, lb. .30¾- .31¼
cryst., dried, dms., works lb. .38¾- .39¼
cuprous, dms., works lb. .3995- .4295
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb lots or more lb. .619 - —
dms., smaller lots lb. .639 - .65
Copper gluconate, dms lb. 3.20 - —
Copper hydrate, dry, dms., c.l., frt. E of Miss lb. .52½- —
dms., l.c.l., same basis lb. .53 - —
Copper metal, electrolytic, dlvd. Valley, basis lb. .31 - —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 8% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .47 - —
red, 97%, USN Type 1, bbls., 100-5,000 lbs. lots lb. .47½- —
90%, USN Type II, bbls., 100-5,000-lb lots or more, works lb. .45½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .47 - —
Copper sulfate, CP, gran., dms., works lb. .1685- —
Cryst., 99%, bgs., c.l., works, 100 lbs. 12.50 - —
bgs., l.c.l., works 100 lbs. 13.00 - 15.50
Monohydrated, 35%, dms., c.l., works 100 lbs. 23.35 - —
dms., l.c.l., works 100 lbs. 24.10 - —
Tribasic, distributors, 50-lb. bgs., c.l., works 100 lbs. 28.60 - —
bgs., l.c.l., works 100 lbs. 30.10 - —
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports ton. 155.00 - —
Pac. coast, c.i.f. ton. 150.00 - —
Coriander oil, USP, bots. lb. 5.75 - 6.25
Coriander seed, Moroccan, bgs. lb. .19 - —
Rumanian, bgs. lb. .14 - —
Yugoslavian, bgs lb. .08½- —
Corn oil, crude, tanks, works lb. .25 - —
Foots, (soapstock, 95% acid) tanks, New York lb. .05¾- —
Refd., salad, dms. lb. .3023- .3050
tanks lb. .2823- —
Corn oil, acid, dms lb. .16 - .18½
tanks lb. .13½- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l. 100 lbs. 7.45 - —
Corn syrup, 43° Be., tanks, dlvd. N.Y. 100 lbs. 6.30 - —
non-ref., dms., c.l., same basis, 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram .85 - .90
Costus oil, bots oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton. 57.00 - 58.00
Cottonseed oil, crude, tanks, South, East lb. .12 - .12⅛
tanks, Valley lb. .11⅞- —
tanks, Tex., Waco lb. .11⅞- —
Foots (soapstock, acid 95%), New York, tanks lb. .04¼- —
Refd., salad, dms lb. .17⅞- .18⅛
tanks lb. .15⅞- —
Cottonseed oil acids, dist., dms lb. .16 - .18½
tanks lb. 13½- —
Coumarin, NF, cryst., dms. lb. 3.20 - 3.30
Cramp bark, NF, bls. lb. 90 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., chys., lb. 3.05 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln. 80%, tanks, works, gal. .226 - —
Refd., dms., c.i., works gal. .50 - —
Creosote, fred., dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, chys., dms., same basis lb. 1.42 1.47
Pinewood, dms., incl., c.l., works, lb. .0611- —
dms. incl., l.c.l., works lb. .0684- —
dms. incl., l.c.l. ex whse, New York lb. .0793- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same lb. .18 - —
non-ret. dms., l.c.l., same basis, lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works, lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2,97% 2°C, dms., c.l., frt. equald, lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret., dms., c.l., frt equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C, m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., f.o.b., frt. alld lb. .50 - —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .45 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., metapara content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Imp., metapara content 25% or less, f.o.b. works, frt. equald, to competitive points, c.l. gal. 1.15 - —
Cresylic acid, imp., metapara content 25% or less, l.c.l., f.o.b., works gal. 1.20 - —
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93% dms., l.c.l., works lb .23 —
Crotonic acid, 200-lb. dms., c.l., dlvd lb. .49 - —
dms., l.c.l., dlvd lb. .51 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 —
bgs., l.c.l., works 100 lbs. 14.25 —
Cubeb oil, cns. lb. 8.50 - 8.75
Cube root, powd., 5% rotenone, bgs., t.l., works lb 21 —
bgs., l.c.l., works lb 22 —
Cubeb berries, NF, bgs. lb 1.30 - —
Powd., cs. lb 1.45 - —
Cumene, dms., c.l., works lb 12 —
dms., l.c.l., works lb 14 —
tanks, works lb .11 —
Cumin seed, Iranian, bgs. lb. .18 - —
Turkish, bgs. lb 18 —
Cumin seed oil, bots., cns lb. 15.50 - 17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract, ton. 57.00 - —
pulv., 21% N, bgs., works, unit-ton. 2.85 - —
Cyanamide, indust. grade, bgs., c.l., works ton. 75.00 - —
bgs., l.c.l., works ton. 96.00 - —
Indust. grade, 8-16 mesh, dms., c.l., works ton. 120.00 - —
dms., l.c.l., works ton 140.00 - —

MONTROSE

CHEMICAL DIVISION

BALDWIN-MONTROSE CHEMICAL CO., INC.

100 LISTER AVENUE

NEWARK, NEW JERSEY

Dimethyl Isophthalate

T.C.P.— Tricresyl Phosphate

Cresyl Diphenyl Phosphate

D.D.T.— Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28%—40%

Triphenyl Phosphate

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1721 TRIBUNE TOWER, CHICAGO 11, ILLINOIS • WHitehall 4-6960

Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal 1.02 - —
dms. l.c.l. same basis gal 1.10 - —
dms. c.l. dlvd W of Rockies gal .77 - —
dms., t.c.l., same basis gal .85 - —
tanks, works gal .55 - —
98% tech 40-dm lots or more, f.o.b works gal .56 - —
5-39 dms. same basis gal .60 - —
tanks, same basis gal .36 - —

Cyclohexanol, tech., dms. c.l., works, frt. alld. E lb .30½- —
dms. t.c.l. works same basis, lb .31½- —
tanks, works, same basis lb .28 - —

Cyclohexanone tech. dms., c.l., works lb .33½- —
dms., t.c.l. works lb .34½- —
tanks, works lb .31 - —

Cyclohexylamine tech. dms., c.l., works lb .49 - —
dms. t.c.l. works lb .50 - —
tanks, works lb .47 - —

Cypress oil bots. lb 5.30 —

D

2,4-D tech. bgs. dms. c.l., works, frt equald lb .40 —
bgs. dms. t.c.l. same basis lb .45 .49

2,4-D butyl ester dms c.l. works, lb .43 —
dms., t.c.l. same basis lb .48 .52
tanks, same basis lb .42 —

2,4-D isopropyl ester, dms., c.l., works lb .43 —
dms. t.c.l. works lb .48 .52
tanks, works lb .42 —

Dammar gum Batavia, A E. cs lb No stocks.
East India Batu bold, bgs lb .15½ .18
nubs and chips, bgs lb .10 .11
black, bold, bgs lb .16 .18
nubs and chips, bgs lb .13 .14½
unscraped bgs lb .13 .14½
East India, pale, chips, bgs lb .16 - .18
pale nubs, bgs lb .20¾ .24
Siam, cs lb .31½ .34
Singapore No. 1, bgs. lb .38 .44
No 2, bgs. lb .29 .32
dust, bgs. lb .18 .20
No 3, bgs. lb No stocks.

Dandelion root, bls lb .35 .40

DDD, tech. flake grd., fib dms., c.l., works lb .45 .47
fib dms. t.c.l. works lb .46 .48

DDT, flake or lump, bgs., c.l., dlvd lb .17 - —
bgs. smaller lots, same basis lb .19 - —
fib. dms., c.l., same basis lb .18 - —
fib dms. smaller lots, same basis lb .21 - —

Powdered DDT 1c per pound higher.

DDVP (see Dimethyl dichlorovinyl phosphate)

1-Decanol, tech. dms. c.l. dlvd E. lb .41½- —
dms., t.c.l., dlvd. E lb .43½- 44½
tanks, dlvd, E lb .37½- —

Decyl alcohol mixed isomers, dms., c.l., dlvd lb .20½- —
dms., t.c.l., dlvd lb .22 - —
tanks, dlvd. lb .18 - —
Perfume grade, bots. lb 1.00 2.00

Decyl alcohol normal (see 1-Decanol)

Deertongue leaves, bls lb .50 .60

Defluorinated phosphate feed grade 14% P paper bgs. c.l. t.l., Tupelo, Miss ton 52.00 —
18% P, paper bgs., c.l., Plant City, Fla ton 61.25 - —
18% P, paper bags, c.l., t.l., Port Arthur, Tex ton 65.75 - —
paper bags, c.l., works, Wales, Tenn ton 66.00 - —
19% P, paper bgs. c.l., t.l. works, Houston, Tex ton 69.35 - —

Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices

Degras common (15-17% free fatty acid), 400-lb dms lb .12 .14
Neutral (over 2% free fatty acid), 400-lb dms lb .13 —

Denatured alcohol, ethyl CD-18, CD-19, dms., c.l., dlvd. E. of Rockies gal .69½- —
dms. t.c.l. same basis gal .74½ 80½
tanks dlvd same basis gal .53½ —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division

Denatured alcohol ethyl proprietary solvent dms., c.l., dlvd E of Rockies gal .72 —
dms. t.c.l. same basis gal .77 .83
tanks same basis gal .56

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division

Denatured alcohol ethyl SD1 dms., dlvd E of Rockies gal .70½ —
dms. t.c.l. same basis gal .75½ 81½
tanks, same basis gal .54½ —
SD2B dms c.l dlvd E of Rockies gal .69 —
dms. t.c.l. same basis gal .74 - .80
tanks, same basis gal .53 - —
SD2A dms c.l dlvd E of Rockies gal .68 —
dms t.c.l same basis gal .73 .79
tanks, same basis gal .52 —
SD23A, dms., c.l., dlvd. E. of Rockies gal .70½- —
dms. t.c.l. same basis gal .75½ 81½
tanks same basis gal .54½ —
SD23H, dms c.l., dlvd E. of Rockies gal .71 —
dms. t.c.l. same basis gal .76 .82
tanks same basis gal .55 —
SD29, dms., c.l., dlvd. E. of Rockies gal .69½- —
dms t.c.l., same basis gal .74½ 80½
tanks, same basis gal .53½ —
SD30, dms. c.l dlvd. E of Rockies gal .68 —
dms. t.c.l., same basis gal .73 .79
tanks same basis gal .52 —
SD35A, dms., c.l., dlvd. E. of Rockies gal .71 - —
dms. t.c.l., same basis gal .76 .82
tanks same basis gal .55 —
SD-40, dms., dlvd. E. of Rockies, gal .70½- —
dms. t.c.l., same basis gal .75½ 81½
tanks, same basis gal .54½ —

For anhyd. alcohol on above formulas prices are 7c per gal higher

West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington where a 5c differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00

dl-Desoxyephedrine hydrochloride, dms lb 6.40 - —

Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.39 - —
paper bgs., l.c.l. 100 lbs. 9.54 - —
canary dark, paper bgs., c.l. 100 lbs. 9.23 - —
paper bgs., l.c.l 100 lbs. 9.38 - —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 - —
paper bgs., l.c.l 100 lbs. 9.28 - —
white paper bgs., c.l. 100 lbs. 8.97 - —
paper bgs., l.c.l 100 lbs. 9.12 - —

Corn dextrin in cotton bgs. 15c per 100 lbs higher

Dextrose anhyd., coml. bgs., c.l. 100 lbs 8.65 - —
bgs. l.c.l 100 lbs 8.80 - —
Anhyd. special, aluminum foil lined fib dms., 200-lb dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs. 15.20 - —
Hydrated, comL, bgs., c.l. ex whse 100 lbs. 7.45 - —
bgs. c.l., ex whse 100 lbs. 7.60 - —
USP dms lb .15¾- —

Diacetone alcohol, acetone-free, dms. c.l., dlvd lb .15½- —
dms., t.c.l., dlvd. lb .17 —
tanks dlvd lb .13 —
Fech dms. c.l. dlvd. lb .15 —
dms. t.c.l., dlvd lb .16½- —
tanks dlvd lb 12½ —

Diacetyl, flavor grade, bots lb. 3.30 4.30

Di-sec-amyl phenol, dms., c.l., works lb .32 —
dms. t.c.l. works lb .33 —
tanks works lb 29½- —

Di tert-amyl phenol, dms. c.l., works lb. .32 —
dms. t.c.l., works lb .33 —
tanks works lb .29½- —

Diallylamine dms., c.l., dlvd. lb 98½- —
dms. t.c.l., dlvd. lb 1.00 - —
tanks dlvd lb .96 - —

o-Dianisidine dry, tech., fib dms. lb 2.00 —

Dibenzyl sebacate dms. c.l. works lb .93 —
dms., t.c.l., same basis lb .93½- .94
tanks same basis lb .91 —

Dibromobenzene, bgs., 500-lb lots, lb .55 - —

2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms, dlvd lb .65 - —
t.t.l. dms. same basis lb .68 —
Food grade c.l. t.l. dms., dlvd. lb .65 —
dms t.t.l. same basis lb .68 1.10
Fech. dms., c.l. t.l. divd. lb .57 —
dms., t.c.l., same basis lb .60 - —
tanks, same basis lb .54 —

Dibutyl fumarate, dms., c.l., t.l., dlvd E lb .31½ —
dms., t.c.l., t.t.l., dlvd E lb .33 —
tanks, dlvd E lb .29 —

Dibutyl maleate, dms. c.l., t.l., dlvd E lb .31½- —
dms., t.c.l., t.t.l. dlvd E lb .33 —
tanks, dlvd E lb .29 —

Dibutyl phthalate dms. c.l. dlvd, E lb .30½- —
dms., t.c.l., same basis lb .32 - —
tankcars, tanktrucks, 2,000 gals. same basis lb .28 - —
tanktrucks, 1,000-1,999 gals same basis lb .28 - —

Dibutyl sebacate dms., c.l., works, lb 67½ —
dms. t.c.l., works lb 68½ —
tanks, works lb 65½- —

Dibutyl tartrate dms. works, frt. alld lb 65¼- —

Dibutylamine dms c.l., dlvd lb 55½- —
dms t.c.l. same basis lb 57 —
tanks same basis lb 53 —

Dicapryl phthalate dms. c.l. dlvd. lb .26 - —
dms., t.c.l., dlvd. lb .27½- —
tanks, dlvd. lb .23½- —

Dicapryl sebacate dms. c.l. works. lb .63 —
dms. t.c.l., works lb 63½- 64
tanks, works lb 61 —

2,5-Dichloroaniline dms. works lb 83 —

3,4-Dichloroaniline tech., solid, tanks frt alld lb .73 —

o-Dichlorobenzene dms. c.l., frt. alld E lb. .12¾ —
dms. t.c.l., same basis lb 13¾- —
tanks, same basis lb 11 —

p-Dichlorobenzene dms. c.l. t.o.b., works, frt alld E lb. 12 —
dms 2,000 lbs or more same basis lb 14½- —

1,4-Dichlorobutane dms. c.l., or t.l., works lb .33½- —
dms. t.c.l. or t.t.l. works lb .34 —
tanks works lb .32 —

Dichlorodiphenyltrichloroethane (see DDT).

4,4-Dichloroethyl ether dms., c.l., t.l. dlvd E lb 15½- —
dms., t.c.l., t.t.l. same basis lb 17 —
tanks same basis lb 13 - —

Dichloroisocyanuric acid dms., c.l., t.l. frt equald lb .65 - —
dms t.c.l. same basis lb .75 —

Dichloropentanes dist. dms. c.l. works lb .05 - —
dms., t.c.l., works lb .06 - —
tanks works lb .03 - —

Dichlorophenoxyacetic acid (see 2,4-D)

Dicyclohexylamine dms. c.l. works lb .54 —
dms t.c.l. works lb .55 —
tanks works lb .52 —

Dicyclohexyl phthalate, gran. fib dms c.l. works frt alld lb .49½- —
fib. dms., t.c.l., same basis lb .51½- —

Dicyclopentadiene dms c.l. t.o.b works lb .14½ —
dms. t.c.l. same basis lb .14¾- —
tanks same basis lb .12 —

Didecyl phthalate dms. c.l. works. lb .26½- —
dms., t.c.l. same basis lb .28 - —
tankcars tanktrucks 2,000 gals lb .23 - —
tanktrucks 1,000-1,999 gals, same basis lb .24½- —

Dieldrin dms. c.l. dlvd. lb 1.85 —
dms. t.c.l dlvd lb 1.90 —

Diethanolamine dms. c.l. dlvd E. lb .27 —
dms. t.c.l. same basis lb 28½- —
tanks same basis lb 24½- —

Diethanolamine lauryl sulfate dms., c.l. frt alld lb 27½ —
dms. t.t.l. frt alld. lb 28½ —
tanks frt alld lb 26½- —

Diethyl barbituric acid (see Barbital)

Diethyl carbonate dms c.l. t.o.b works lb 47½- —
dms., t.c.l., same basis lb 48½- —
tanks, same basis lb 45 —

Diethyl ethanolamines, dms., c.l., dlvd lb 69½- —
dms., t.c.l., dlvd. lb 71 —
tanks, dlvd lb .67 —

Diethyl oxalate dms. c.l. t.o.b. works lb 42½- —
dms., t.c.l. same basis lb 43½- —
tanks, same basis lb 40 —

Diethyl phthalate, dms., c.l., dlvd. lb .28¼- —
dms., l.c.l. dlvd. lb .29¼- —
tanktrucks, 1,000-1,999 gals, same basis lb .25¾- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb .25¼- —

Diethyl sulfate, dms, c.l., frt. alld. E. lb .21 - —
dms., t.c.l., frt. alld. E lb .22½- —
tanks, frt. alld. E lb .18½- —

Diethyl thiourea dms. c.l., t.l., works lb .58 - —
dms., t.c.l., same basis lb .59 - —

Diethyl toluamide, 90-95% meta isomer dms c.l. t.l., works. lb 2.30 - —
5-44 dm lots works lb 2.35 - —
1-4 dm lots, works lb 2.40 - —

N,N-Diethyl-m-toluidine tech., liq., tanks, frt alld lb .83 - —

Diethylamine dms c.l. dlvd E lb .52 —
dms. t.c.l., same basis lb .53½- —
tanks, same basis lb .49½- —

N,N Diethylaniline dms. c.l., frt. alld lb .57 - —
dms., t.c.l., same basis lb .58 - —
tanks, same basis lb .55 —

Diethylbenzene, 380 lb dms., c.l., t.l. frt alld., Zone 1 lb .17½- —
f.o.b. Zone 2 lb .18½- —
380-lb. dms., t.c.l., c.l., f.o.b. Zone 1 lb .19½- —
f.o.b warehouse points, Zone 2 lb .20½- —
tankcars, Zone 1 lb .15 - —
Zone 2 lb .16 —

Zone 1 is East of the Rockies. Zone 2, West of the Rockies.

Di-2-ethylhexyl adipate (see Di-octyl adipate).

Di-2-ethylhexyl phthalate (see Di-octyl phthalate).

Diethylene glycol dms. c.l. dlvd E. lb .17¾ —
dms. t.c.l. same basis lb .19¼- —
tanks same basis lb .15¼- —

Diethylene glycol diethyl ether, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .55¾- —

Diethylene glycol monobutyl ether, c.l., dms., frt. alld E lb. .30¾- —
dms., t.c.l., frt. alld. E lb. .32¼- —
tanks, frt. alld E lb. .28¼- —

Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., t.c.l., works lb .31½- —
tanks, works lb .28¾- —

Diethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .22½- —
dms., t.c.l., dlvd. E lb .24 - —
tanks dlvd E lb .20 - —

Diethylene glycol monoethyl ether acetate dms. c.l., works, lb .27¼- —
dms. t.c.l., works lb .28 - —
tanks, works lb .25¼- —

Diethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E lb. .22½- —
tanks, dlvd E. lb. .18½- —

Diethylenetriamine dms. c.l., dlvd, E lb. .44 - —
dms. t.c.l., dlvd E. lb. .45½- —
tanks, dlvd E. lb. .41½- —

Diethylstilbesterol, USP, bots. 10-kilo lots kilo 100.00 147.50
bots. 1 kilo lot kilo 110.00 152.50

Digitalis leaves USP dom. dms lb 1.25 —

Digitoxin, USP, bots gram 3.75 4.20

Diglycol laurate dms. ton lots lb. .32½- —

Diglycol stearate, dms., t.l lb. .26 - —

Digiycolic acid bgs c.l. t.l., works. lb. .15½- —
bgs. t.c.l. works lb. .16 - —

Dihexyl sebacate dms. c.l., works. lb. .66 - —
dms. t.c.l., works lb. .67 - —
tanks works lb. .64 - —

Dihydrazine sulfate dms., works lb. 1.10 1.25

Dihydrostreptomycin sulfate bulk, gram .028 - .03

1,2-Dihydroxy anthraquinone, dms., works lb 3.45 - —

2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
Fech. dms., 20,000 lbs or more lb 1.11 - —
dms. 1,050 lbs to 20,000 lbs. lb 1.13 - —
dms. 150 lbs to 1,050 lbs lb 1.15 - —

Di-isobutyl ketone dms. c.l. dlvd. lb .17 —
dms. t.c.l. dlvd. lb .18½- —
tanks dlvd lb .14½- —

Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .29 - —
dms., t.c.l., same basis lb. .30½- —
tanks, same basis lb. .26½- —

Di-isobutylene dms c.l., dlvd E lb. .10 —
dms. t.c.l., dlvd E lb. .11½- —
tanks dlvd E lb. .08 - —

Di-iso-octyl phthalate, dms., c.l., works lb. .26 - —
dms., t.c.l., same basis lb. .27½- —
tanktrucks, 1,000-1,999 gals. works lb. .24 - —
tankcars tanktrucks, 2,000 gals., works lb. .23½- —

Di-iso-octyl sebacate, dms., c.l., works lb. .62 —
dms., t.c.l., works lb. .61¼- —
tanks works lb. .60 —

Di-isopropanolamine dms. c.l., dlvd. lb. .23¼- —
dms., t.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —

Di-isopropylamine dms., c.l., dlvd. E of Rockies lb. .50½- —
dms., t.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —

Dillweed oil, dem., bots., dms lb. 4.50 - —

Dimethyl anthranilate cns lb 4.15 - —

Dimethyl dichlorovinyl phosphate, 55-gal dms. dlvd lb. 3.50 - —

Dimethyl ethanolamine, anhyd., dms., c.l., dlvd E lb. .78 - —
dms., t.c.l., dlvd. E lb .79½- —
tanks, dlvd E lb. .75½- —

Dimethyl ethanolamine, 70% dms., c.l., dlvd., 100% basis, contained amines lb. .78 - —
dms. t.c.l. dlvd 100% basis lb. .79½- —
tanks dlvd., 100% basis lb. .75½- —

Dimethyl hydroquinone dms. lb 1.90 2.20

Dimethyl phthalate, dms., c.l., works lb. .28¼- —
dms., t.c.l., works lb. .29¾- —
tanktrucks, 1,000-1,999 gals., same basis lb. .26¼- —
tankcars tanktrucks, 2,000 gals., same basis lb. .25¾- —

Dimethyl sebacate dms. c.l., works. lb. 1.30 - —
dms., t.c.l., works lb. 1.30½- 1.31
tanks, works lb. 1.28 —

Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., t.c.l., works lb. .18½- —
tanks, works lb. .16½- —

Dimethyl sulfide, dms., c.l., works. lb. .17½- —
dms., t.c.l. works lb. .18½- .19½
tanks, works lb. .15 - —

Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 - —
dms., t.c.l., same basis lb. .37 - .38
tanks, same basis lb. .33 - —

Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .36 - —
dms., t.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis lb. .28 - —
40% soln., dms., c.l., frt. equald., 100% basis lb. .35 - —
dms., t.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald., 100% basis lb. .28 - —

N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms. t.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —

N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., t.c.l., works lb. .33 - .34
tanks, works lb. .30 - —

2,4-Dinitroaniline, dms. frt. alld lb. .75 - —

Dinitroaniline orange toner, CP, bbls. dlvd E. of Rockies, lb 1.61 - —

Dinitroaniline orange toner prices 1c. higher W of Rockies

m-Dinitrobenzene 89°C., dms. lb .26 —

2,4-Dinitrochlorobenzene, crystallizing at 46½°C. dms., c.l., frt. alld E lb. .17¼- —
dms. t.c.l. frt. alld E. lb. .17¾- —
tanks frt alld E. lb. .17 —

2,4-Dinitrophenol bbls lb .41 —

2,4-Dinitrotoluene oil, dms. lb .11 - —
Refd. 63°C. dms. lb .23 - —

Dioctyl adipate, dms., c.l., works. lb. .37½- —
dms., t.c.l., works lb. .39 - —
tanks, works lb. .35 - —

Dioctyl phthalate, dms., c.l., frt. alld. E lb. .26 - —
dms., t.c.l., frt. alld. E lb. .27½- —
tanktrucks 1,000-1,999 gals., same basis lb. .24 - —
tankcars tanktrucks, 2,000 gals., same basis lb. .23½- —

Dioctyl phthalate prices ¾c. higher in West.

Dioctyl sebacate dms., c.l., works. lb. .59 - —
dms., t.c.l., works lb. .59½- .60
tanks, works, dlvd lb. .57 - —

1,4-Dioxane, dms., c.l., frt. alld. E. lb. .31½- —
dms., t.c.l., frt. alld. E lb. .33 - —
tanks, frt. alld. E lb. .29 - —

Prices in the west are 2c per lb. higher.

Dipentaerythritol, bgs. c.l. t.l., dlvd. E lb. .34 - —
bgs., t.c.l., t.t.l., dlvd. E lb. .35 - —

Dipentene, dest-dist. dms., c.l., works gal. .58 - —
dms. t.c.l. works lb. .62 - —
dms., t.c.l. ex whse. gal. .78 - —
tankscars, works gal. .41 - —

Dipentane, steam dist., dms., c.l., works South gal. .72 - —
dms., t.c.l., dlvd New York gal. .91 - —
tanks, works, South lb. .55 - —

Dip oil (see Tar acid oil).

Diphenolic acid 1,000-lb or more, bgs, works lb. .75 - —

Diphenolic poly-ether acids, 1,000-lb. or more, bgs. works lb. 1.00 - —

Diphenyl, bgs. c.l. t.l., works lb. .16¾- —
bgs. t.c.l., works lb. .18½- —
tanks, works lb. .15¾- —

Diphenyl oxide perfume grade, cns. lb. .55 .70

Diphenyl phthalate dms. c.l. works. lb. .51 - —
dms., t.c.l., works lb. .53 - —

Diphenylamine, retd. flake, bgs., c.l., works frt. equald lb. .32 —
bgs. t.c.l., same basis lb. .34 —
Refd., fused tanks same basis lb. .29 - —
Refd. diphenylamine in dms., ½c per lb higher

Diphenylguanadine bgs., dms., ton lots, frt. alld lb. .51 - —
bgs., smaller lots, frt. alld lb. .52 - —

Diphenylhydantoin-sodium, USP, dms lb. 5.00 5.60

Dipropylene glycol dms., c.l., frt. alld lb. .17 - —
dms. t.c.l. frt alld lb. .18½- —
tanks, frt alld lb 14¼- —

Dipropylene glycol prices 1c. higher in West.

Dipropylene glycol methyl ether, dms. c.l., dlvd. E lb. .20 —
dms. t.c.l. same basis lb. .21½- —
tanks, same basis lb. .18½- —

Dithiodibenzoic acid dms. 1,000-lb. lots, works lb. 1.80 - —

Di-o-tolylguanidine dms., ton lots, frt. alld lb. .71 - —
dms., smaller lots, frt. alld lb. .72 - —

Di-o-tolylthiourea tech. solid, dms., c.l. t.l. frt alld lb. .55 - —

Divinylbenzene, 20-25% dms., c.l., works, frt equald lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —

50-60% dms. c.l., works, 100% basis lb. 1.00 - —
dms. t.c.l. works, 100% basis. lb. 1.05 - —
tanks same basis lb. .90 - —

Dodecenyl succinic anhydride dms., c.l., t.l., dlvd. E lb. .50 - —
dms., t.c.l., same basis lb. .52 - —

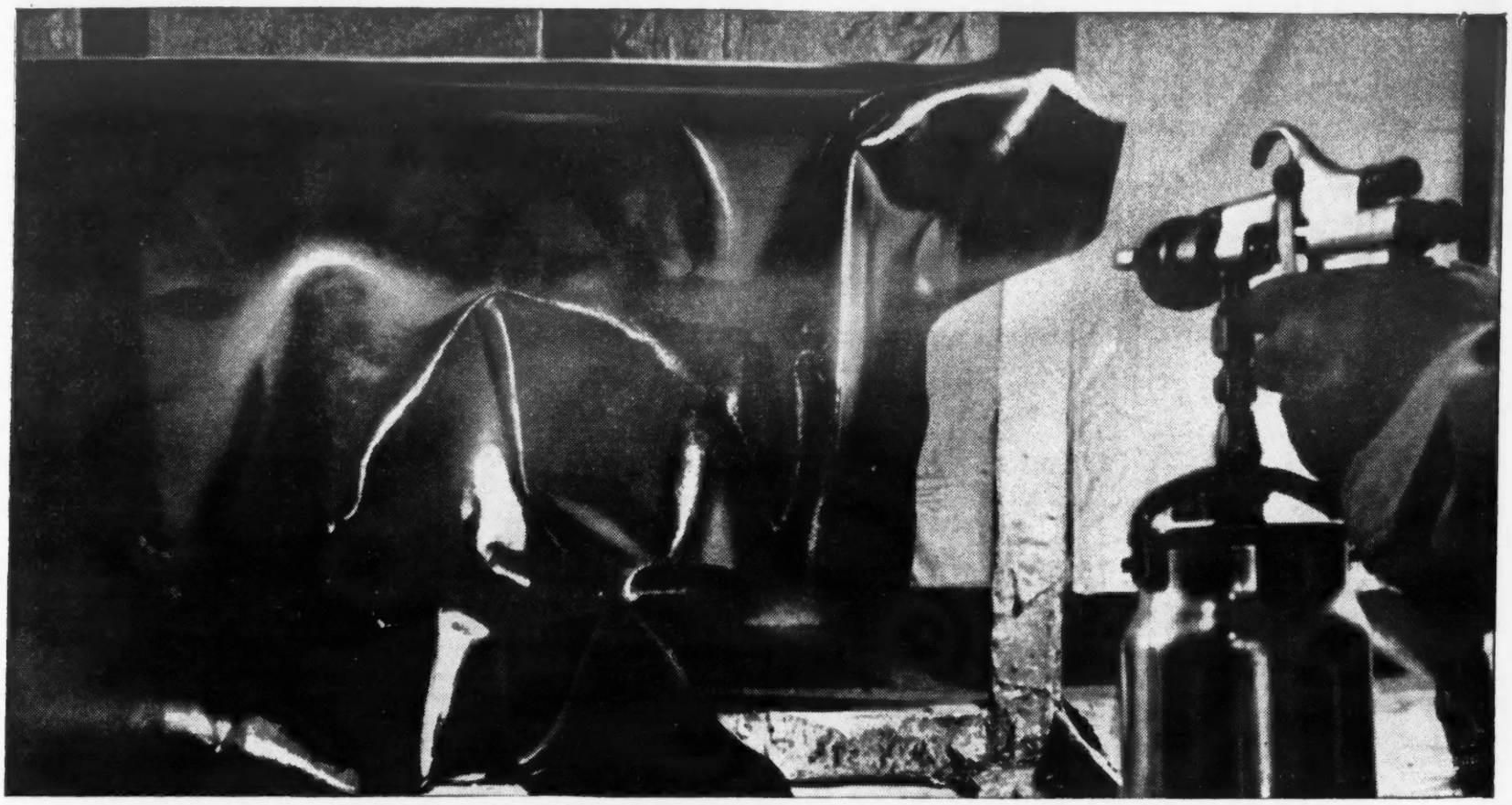
Dodecylbenzene, dms., c.l., t.o.b., works, frt equald lb. .134 - —
dms. t.c.l. same basis lb. .144 - —
tanks, same basis lb. .11 - —

Dodecylphenol c.l., frt. alld lb. .22½- —
dms., t.c.l., same basis lb. .23½- —
tanks, same basis lb. .20 —

Dodecylphenol prices on shipments to Western States are 2c per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 25-lb.lots, frt. prepaid or alld.
Blue, FD&C, No. 1 lb.15.65 -16.43
No. 2 lb.15.65 -16.45
Green, FD&C, No. 1 lb.15.65 -16.45
No. 2 lb.19.60 -20.40
No. 3 lb.31.30 -32.10
Red, FD&C, No. 2 lb. 3.60 - 4.40
No. 3 lb.19.60 -20.40
No. 4 lb. 6.00 - 6.80
Yellow, FD&C, No. 5 lb. 3.75 - 4.55
No. 6 lb. 3.65 - 4.45

Dyes coaltar certified colors for drugs and cosmetics, 200-lb and 1-lb lots, dlvd.:
Black, D&C, No. 1 lb.12.40 -13.00
Brown, D&C, No. 1 lb.16.35 -16.95
Green, D&C, No. 5 lb.17.00 -17.60
No. 6 lb.17.40 -18.00
No. 7 lb.14.35 -14.95
Orange, D&C, No. 3 lb.10.50 -10.95
No 4 lb.19.60 -20.05
No 5 lb 3.80 4.25
Red, D&C, No. 17 lb.12.55 -13.15
No. 18 lb.23.55 -24.15
No 19 lb.15.00 -15.45
No 21 lb 3.90 4.35
No 22 lb.10.50 -10.95
No. 28 lb.27.90 -28.50
No 33 lb.17.00 -17.45
Violet, D&C, No. 2 lb.15.65 -16.10
Yellow D&C, No. 7 lb.10.50 -10.95
No 8 lb .0.50 -10.95
No. 10 lb.15.10 -15.70
No. 11 lb.14.80 -15.40



Growing use for urethane coatings: making economical patent leather coatings. Shell's versatile Pent-Oxone high boiling solvent works well in urethane and most other coatings, eliminates need for premium-priced specialty solvents.

URETHANE FORMULATORS:

Shell's multi-purpose Pent-Oxone* solvent gives you the advantages of a specialty high boiler for urethane coatings—yet lets you reduce solvent inventory

Shell's Pent-Oxone solvent is excellent for two-package urethane coating systems. You can also use it to good effect in almost every other type of surface coating you make.

Result: reduced inventories for the specialty coating formulator who doesn't want to stock premium-priced specialty solvents.

SHELL CHEMICAL's Pent-Oxone solvent combines both ketone and ether functional groups in a unique new keto-ether molecule.

As you might expect, this remarkable structure makes Pent-Oxone an outstanding and versatile solvent.

Good urethane solvent

Pent-Oxone solvent is a true high boiler, with an even evaporation rate midway between the evaporation rates of cyclohexanone and EGMEE acetate.

In urethane coating systems, Pent-Oxone solvent combines strong and effective solvency with low isocyanate reactivity. Pent-Oxone has no labile hydrogen and never needs to be upgraded for purity.

Viscosities of typical urethane coatings, using 40 parts solids in 100 parts of 50/50 Pent-Oxone/xylene, range between 11.5 and 53.0 cps. after one-day storage at 25 degrees centigrade.

Isocyanate percentages remaining after eight-week storage of Pent-Oxone solvent and toluene di-isocyanate (25 per cent in toluene) are on the order of 96.2 per cent.

Lets you reduce inventory

Pent-Oxone solvent is extremely versatile. By using it in other coating formulations, you can reduce high boiler inventory.

In acrylic lacquers, Shell's Pent-Oxone solvent will give you outstanding gloss and excellent flow. Its solvency is in all respects equal to that of EGMEE acetate.

In vinyl lacquers, Pent-Oxone can lower your high boiler costs and give you a better-smelling product.

In nitrocellulose lacquers, Pent-Oxone solvent provides low viscosity, good flow-out and excellent blush resistance. Its dilution ratio is comparable to that of low boilers.

You will also find Pent-Oxone solvent an excellent high boiler for cellulose acetate butyrate lacquers, for alkyd and epoxy enamels and for thermo-setting acrylic coatings.

New technical bulletins

New technical bulletins are either available or being prepared on all these applications, as well as on the general properties of Pent-Oxone solvent and its near relation, Pent-Oxol* glycol ether solvent.

To get copies, plus samples, contact any of Shell's 9 Industrial Chemical offices, or write directly to Shell Chemical Co., 110 W. 51st, New York 20, New York.

*Trademark, Shell Chemical Co.

Shell Chemical Company

SHELL

Industrial Chemicals Division

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, dlvd.:
Blue Ext., D&C, No. 1 ..... lb 15.65 -16.10
Green, Ext. D&C No 1 ..... lb 15.65 -16.10
Red, Ext., D&C, No. 1 ..... lb 13.05 -13.50
Yellow Ext D&C No 1 ..... lb 10.50 10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd No.
11110 Brilliant scarlet BN lb 1.79 - —
11390 Fast blue SR lb 1.57 - —
14025 Yellow 2G lb. 1.32 - —
14030 Orange R. extra, conc. lb 1.64 - —
14645 Chrome black I lb 77 - —
14720 Rubine XX, conc lb 1.76 - —
15510 Orange Y, extra conc. lb 83 - —
15575 Orange RR lb. 1.10 - —
15620 Fast Red A, conc. lb 1.77 - —
15705 Chrome blue black R conc lb 1.12 - —
16150 Scarlet 2RL lb 1.22 - —
16255 Brilliant scarlet 3RN, conc lb. 1.34 - —
16230 Fast light, orange 2G lb 1.39 - —
17590 Brown PG lb 3.00 - —
18050 Phloxine 2G lb 1.16 - —
18055 Fuchsine 6B lb 1.55 - —
18965 Fast yellow 2G lb. 2.44 - —
19140 Yellow XX lb 2.48 - —
19555 Yellow NN conc. lb 3.67 - —
20170 Brown Y lb 1.33 - —
20470 Blue black, extra, conc lb. 1.44 - —
21010 Brown, RX, conc lb 1.42 - —
22240 Scarlet B lb 2.81 - —
22310 Red FC lb 1.57 - —
22311 Brown MCW lb. 1.59 - —
22610 Blue 2B, extra conc lb. 1.62 - —
23500 Red 4BX, conc. lb 1.80 - —
24410 Sky blue FF extra conc. lb 1.95 - —
24895 Brilliant yellow conc lb 3.27 - —
26360 Navy blue 3R, conc lb 1.84 - —
26695 Black F, conc. lb 2.30 - —
26900 Milling Red 3R, conc lb 2.24 - —
27075 Neutral black 2B, conc lb. 2.75 - —
27720 Gray L lb. 2.29 - —
29185 Fast scarlet 4BNC lb 2.23 - —
30015 Diazo black VJ conc lb 2.48 - —
30045 Yellow brown K, extra lb 1.45 - —
30235 Black EB, 200% lb 1.33 - —
30295 Green BY conc. lb 1.07 - —
35650 Brown B lb 2.89 - —
37565 Naphthol SWF lb 1.85 - —
40000 Yellow 2G lb 1.44 - —
41000 Yellow OX lb 2.45 - —
42000 Green V crystals lb 2.73 - —
42040 Brilliant green G crystals lb 3.62 - —
42640 Violet 4BXN lb 2.43 - —
42090 Blue EG lb 1.85 - —
42100 Milling green 6B, conc. lb 4.78 - —
43830 Brilliant blue, BBG lb 2.44 - —
44045 Blue B, extra conc. lb 3.61 - —
45170 Red BX lb 4.76 - —
50415 Nigrosine SSJ lb 1.03 - —
52015 Blue GXX lb 2.54 - —
59700 Golden orange GFD, single paste lb 2.70 - —
59710 Flaming orange 6RD double powder lb 4.90 - —
59800 Dark blue BO, single paste lb 2.28 - —
59825 Jade green NC supra, double paste lb 1.75 - —
61570 Alizarin green CG, extra lb. 4.00 - —
63010 Alizarin blue SAPC lb 3.90 - —
63615 Alizarin blue black B lb 3.26 - —
69825 Blue BLFD double paste lb 2.76 - —
70800 Brown BR single paste lb 2.03 - —

Dyes, coaltar, oil-soluble, 100 lb drums, dlvd, No.
12140 Oil scarlet BL lb. 1.87 - —
12055 Oil orange 7078 V lb. 1.38 - —
26120 Oil red N 1700 lb. 1.94 - —
42555B Methyl violet base lb. 1.88 - —
44045B Victoria blue base lb. 4.06 - —
50415B Oil black 8603 lb. .80 - —
61565 Alizarin cyanine green base, lb. 6.13 - —

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black RB lb. 3.89 - —
Spirit brown GN lb 5.30 - —
Spirit orange R conc. lb 5.87 - —
Spirit red B conc. lb 6.41 - —
Pr 517 Spirit yellow 2R conc lb 4.62 - —
Pr 554 Spirit blue THN lb 5.06 - —

E

Echinacea root, bls. ..... lb. 1.25 - —
Elm bark, grinding, bls. ..... lb. .30 - .32
Powd., bbls., bxs. ..... lb. .60 - —
Select, bundles ..... lb. .75 - —
Emetine hydrochloride, USP, bots oz. 48.40 - —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd lb. 2.77 - —
Eosin red toner, bbls., works lb. 1.95 - —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots oz. .98 - 1.00
hydrous, bots., 100-oz. lots, oz. .92 - —
Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works oz. .75 - —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —
Epichlorohydrin, dms., c.l., dlvd lb. .29½ - —
dms., l.c.l., dlvd. lb. .31 - —
tanks, dlvd. lb. .27 - —
Epinephrine base, syn., USP, bots., 100 gram lots gram .58 - —
Epsom salt (see Magnesium sulfate).
Ergeron oil cns. lb. 11.00 - —
Ergot, NF, dms., tin-lined lb. 2.00 - 2.50
Eserine salicylate, bots. oz. 34.50 -40.00
Eserine sulfate, bots. oz. 26.00 - —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18½ - —
Ester gum, wood-rosin type, dms., c.l. same basis lb. .18½ - —
Ether (see specific product)
Ethyl acetate, nat., ferment, 85-88%, dms. c.l. dlvd lb .15 — —
dms., l.c.l., dlvd lb .16½ — —
tanks dlvd lb .12½ — —
95-98% dms. c.l. dlvd lb .15¼ — —
dms. l.c.l., dlvd lb .16¾ — —
tanks dlvd lb .12¾ — —
99%, dms., c.l., dlvd lb. .15½ - —
dms. l.c.l., dlvd lb .17 — —
tanks, dlvd lb .13 — —
Syn., 85-88%, dms., c.l., dlvd lb. .15 - —
dms. l.c.l., dlvd lb .16½ — —
tanks, dlvd lb .12½ - —
95-98%, dms., c.l., dlvd lb. .15¼ - —
dms. l.c.l., dlvd lb .16¾ — —
tanks dlvd lb .12¾ — —
99%, dms., c.l., dlvd lb. .15½ - —
dms. l.c.l., dlvd lb .17 — —
tanks dlvd lb .13 — —
Ethyl acetoacetate, dms. c.l., dlvd lb 58½ - —
dms. l.c.l. dlvd. lb 60 — —
tanks, dlvd lb .56 — —
Ethyl acrylate, dms., c.l., t.l., dlvd lb. .34¾ - —
dms., l.t.l., dlvd lb. .35¾ - —
tanks, dlvd. lb. .32¼ - —

Ethyl alcohol, 190 pf., USP, tax paid dms. c.l., dlvd. E. of Rockies gal. 20.63 - —
dms., l.c.l., same basis gal. 20.73 -20.84
USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 - —
Ethyl alcohol, 190 pf., USP, tax free, dms., l.c.l., same basis gal. .78 .89
tanks, same basis gal .52 —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd E of Rockies gal. 21.75 - —
dms., l.c.l., same basis gal. 21.85 -21.96
tanks, same basis gal. 21.59 - —
Ethyl alcohol denatured (see Denatured alcohol ethyl)
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone dms. c.l., dlvd. lb .20 — —
dms. l.c.l. same basis lb. 21½ — —
tanks, same basis lb 17½ — —
Ethyl benzoate bots. lb .75 1.00
Ethyl bromide tech., 98%, dms., c.l., frt. alld. E lb .43 — —
dms. l.c.l. frt alld E lb .45 — —
tanks, frt. alld. E lb .40 - —
2-Ethyl butyl alcohol, dms., c.l., works lb .30 — —
dms., l.c.l., works lb .30¾ — —
tanks, works lb .28 — —
Ethyl butyl ketone dms. c.l., t.l., works lb. .36 — —
dms. l.c.l., t.l. works lb. 36¾ - —
tanks works lb. 34 - —
Ethyl butyrate dms. works lb. .85 1.00
Ethyl carbamate (see Urethane)
Ethyl cellulose, vis. 4 cps. ngs., 5,000 lb lots or more, frt. alld. E lb. .73 — —
ngs. smaller lots frt alld E lb .75 — —
vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb lots or more, frt. alld. E lb. .68 - —
Ethyl cellulose, vis., 10-20-50-100-150 cps., bgs., smaller lots, frt. alld. E lb. .70 - —
Ethyl chloride tech. cyls. works. lb .20 .22
dms., works lb .18 .20
tanks, works lb .10 —
Ethyl cinnamate, cns lb. 3.35 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd E lb. 43½ — —
dms. l.c.l. dlvd E lb. 44½ — —
tanks dlvd E lb 41½ — —
Ethyl ether, absolute ACS dms lb .27 — —
Anesthesia USP dealers, 1-lb. cns lb 1.01 — —
½ lb cns lb 1.09 — —
¼-lb cns lb 1.21 — —
Indust. dms. c.l. dlvd. lb. .13½ - —
dms., l.c.l., dlvd E lb. .15 — —
tanks dlvd E lb .13 — —
2-Ethyl hexoic acid dms., c.l., t.l., dlvd E lb .37 — —
dms. l.c.l., t.l. dlvd E lb .38½ — —
tanks dlvd E lb 34½ — —
2-Ethyl hexoic acid 1c. higher W. of Rockies.
2-Ethylhexyl acrylate, dms., c.l. t.l., straight or mixed frt. alld. E lb. .39½ - —
dms., l.t.l., same basis lb. .40½ - —
tanks, same basis lb. .37 - —
2-Ethylhexyl alcohol, dms., c.l., dlvd. E lb. .20½ - —
dms., l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18 - —
Ethyl iodide chvs. works lb 3.30 — —
Ethyl methacrylate dms c.l., frt equald lb 52 — —
dms. l.t.l. frt equaid lb 52½ - —
tanks frt. equaid lb 50 - —
Ethyl morphine hydrochloride, USP hots oz. 11.85 - —
Ethyl oenanthate dms lb 1.05 1.30
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate dist. (see Tetraethyl orthosilicate)
Ethyl silicate 40% available SiO_2 dms., c.l., dlvd. E lb. .49 - —
dms., l.c.l., dlvd. E lb. .50½ - —
tanks, dlvd. E lb. .47 - —
N-Ethyl-a-naphthylamine dms. works lb 1.04 - —
N-Ethyl-m-toluidine tech., liq., tanks frt alld lb 83 - —
N-Ethyl-o-toluidine, bbls lb. 88 - —
Ethylamine (see Mono- Di- or Tri-)
N-Ethylaniline dms. c.l. frt. alld. lb .57 — —
dms. c.l. frt alld lb .58 — —
tanks, frt. alld lb .55 — —
Ethylbenzene 99% dms. c.l., t.l., frt. equaid lb. .14 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .11½ - —
Ethylene, contract refy gate lb .0475 .052
Ethylene dibromide dms. c.l., frt. equaid lb .30½ — —
dms., l.c.l. frt equaid lb .31½ — —
tanks frt equaid lb .28½ — —
Ethylene dichloride dms. c.l. dlvd. lb .11½ - —
dms., l.c.l., same basis lb. .13 - —
tanks, same basis lb .09 - —
Ethylene dichloride prices W. of Rockies, 1c per lb higher
Ethylene glycol indust dms., c.l., dlvd E lb. .16 — —
dms., l.c.l. same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
Ethylene glycol monobutyl ether, dms. c.l., dlvd E lb. .22 — —
dms. l.c.l., dlvd E lb. 23½ — —
tanks, dlvd E lb. 19½ - —
Ethylene glycol monoethyl ether, dms. c.l. dlvd E lb .21 — —
dms., l.c.l., dlvd E lb. .22½ - —
tanks, dlvd E lb. .18½ - —
Ethylene glycol monoethyl ether acetate dms., c.l. dlvd. E lb. .19½ - —
dms., l.c.l., dlvd. E lb. .21 - —
tanks, dlvd E lb. .17 - —
Ethylene glycol monomethyl ether, dms c.l., dlvd E lb. .21 — —
dms., l.c.l. dlvd E lb. .22½ - —
tanks, dlvd E lb. .18½ - —
Ethylene glycol monomethyl ether acetate, dms., c.l., works lb. .29 - —
dms., l.c.l., works lb. .29¾ - —
tanks, works lb. .27 - —
Ethylene glycol monostearate flake, 150-lb ctn lb. .33 - —
Ethylene oxide dms. c.l. dlvd E. lb. .21½ - —
dms., l.c.l., dlvd E lb. .24½ - —
tanks dlvd E lb. .15½ - —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine 85-88%, dms., c.l., dlvd. E., 100% basis lb. .40 - —
dms l.c.l. dlvd E. 100% basis. lb. .41½ - —
tanks, dlvd. E., 100% basis lb. .38 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. lb. 7.40 - —
Eucalyptol, USP cns. dms lb. .85 1.40
Eucalyptus oil, NF rectified, 70-75% dms lb. .45 — —
NF rectified, 80-85% dms lb 53 — .62
USP, dms. lb. 1.90 - —
Euphorbia herb, bls lb .12 — .15

F

F salt paste, tech., dms., works lb. 2.50 - —
Fennel oil, sweet, USP, cns. ... lb. 2.60 - —
Fennel seed, Argentine, bgs. ... lb. .17½ - —
French, light, bgs. ... lb. .16½ - —
Indian, light, bgs. ... lb. .16½ - —
Yugoslav, light, bgs. ... lb. .17½ - —
Fenugreek seed, Moroccan, bgs. lb. .12 - —
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. 8.00 - —
dms., l.c.l., works 100 lbs. 9.00 - —
Indust., cryst., bbls., c.l., works, 100 lbs. 5.25 - 6.75
bbls. l.c.l., works 100 lbs 5.75 7.25
Ferric chloride 42° Be., photo grade, cbys., c.l. works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt equald. 100% basis 100 lbs. 4.00 - —
USP cryst. dms. t.l. works lb. .08½ - —
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite, NF 175-lb. drm lb. 4.25 - —
Ferric naphthenate liq., 6% Fe, dms. frt alld lb. .28¼ - —
Ferric oxalate, tech., gran. 50-lb. dm., f.o.b. works E lb. 1.30 - —
Ferric oxides (see iron oxides)
Ferric phosphate NF soluble, gran pearls, cs lb. .72 .75
Ferric pyrophosphate, NF VII soluble, gran. pearls, 225-lb dm. lb. .79 - —
Ferric resinate dms. ton lots, frt. alld lb. .45 - —
Ferric stearate dms. c.l. frt alld. lb. .39 - —
dms., l.c.l., frt alld lb. 40 44
Ferric sulfate partly hydrated, bgs. c.l., works ton 35.25 - —
bgs., l.c.l., works ton 36.25 -42.25
bulk, c.l., works ton 33.25 - —
Ferric-amonium citrate, NF, brown, gran., 100-lb. dms lb. .68 - —
NF, green, gran., 100-lb. dms., frt equald lb. .68 - —
Ferric-ammonium oxalate, fine gran., dms lb. .27½ - .29½
Ferric-potassium oxalate, fine gran., 250-lb dm., f.o.b. works lb. .32½ - —
Ferric-sodium oxalate, fine gran., dms lb. .27½ - .29½
Ferrous gluconate USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran. bgs., c.l., works ton 34.50 - —
bgs., l.c.l., dlvd Metropolitan area 100 lbs 3.35 4.25
bbls., c.l., works ton 40.00 — —
bulk, c.l., works ton 27.00 — —
USP cryst., bbls. dms lb 09½ - .10
Fir balsam, Canada, bbls gal. 34.00 -35.00
Oregon bbls gal 3.40 4.64
Fir oil, Canada, cns lb. 1.70 1.75
Fish oil, refd., alkali, dms. lb. .1380 - .1430
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1280- .1330
tanks lb. .1080- —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton. 118.00 -120.00
Fishscrap, dom menhaden, dried, 60% protein, grd. bgs., Atlantic and Gulf coasts. ton. 114.00 -116.00
Fleaseed (see Psyllium seed)
Folic acid, USP, nots. fib dms. kilo lots or more gram .25 - —
10% feed grade fib dms. 3 kilos or more kilo 30.00 - 44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0690- —
tanks, dlvd. lb. .0430- —
37% (inhibited, 7% methanol) tanks, dlvd lb. .0405- —
44% (1% methanol), tanks lb. .0446- —
37%, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid 85% cbys c.l. works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90% cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .65 .70
Fumaric acid, tech., 250-lb dms., c.l., frt equald lb. 23¼ - —
dms., l.c.l., frt equald lb. 24¾ - —
Fumaric acid in bags ½c. per lb less.
Furfural dms. c.l. works lb. .13 - —
dms. l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .11½ - —
tanks, dlvd. W lb. .12½ - —
Furfuryl alcohol, cns., works lb. .28 — —
dms., c.l., t.l., Newark, N. J lb. .19½ - —
dms., l.c.l., t.l., Newark, N. J lb. .20½ - —
dms., c.l., t.l., Memphis, Tenn lb. .18 - —
dms., l.c.l., t.l.l., Memphis, Tenn. lb. .19 - —
tanks, dlvd. E. of Denver lb. .175 - —
Fusel oil, refd dms. c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd. lb. .19½ - —
tanks, dlvd. lb. .15½ - —

G

G salt, bbls, frt alld., 100% basis lb. 73 - —
Gallic acid NF VII bbls, 1,000-lb. lots lb 2.00 — —
bbls., smaller lots lb 2.02 2.22
Tech., bbls., 1,000-lb. lots lb 1.78 - —
bbls. smaller lots lb 1.80 2.00
Gamma acid dry grd. bbls., frt. alld lb. 1.75 - —
Gammapicoline (see g-picoline)
Garlic oil dom. bots oz. 4.75 6.05
Imp. bots oz. 4.50 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin edible 75 AOAC test bbls., c.l., dlvd lb. .55 - —
150 AOAC test bbls., c.l. dlvd. lb. .64 - —
200 AOAC test bbls. c.l. dlvd. lb. .70 - —
225 AOAC test bbls. c.l. dlvd. lb. .74 - —
275 AOAC test bbls. c.l., dlvd. lb. .82 - —
Gelsemium root, bls lb. .30 - .35
Gentian root bls. lb. .24 - —
Grd., bbls, bxs lb. .30 - —
Powd. bbls bxs lb .30 — —
Geraniol extra cns. dms. lb 1.75 2.40
Soap grade dms lb .90 1.75
Standard cns. dms. lb. 1.65 — —
Synthetic dms lb 1.30 — —
Geranium oil, Algerian, cns. lb. 21.00 -24.00
Bourbon, cns. lb. 14.00 -18.00
Turkish (see Palmarosa oil).
Geranyl acetate cns lb 1.90 2.70
Synthetic dms lb 1.45 — —
Ginger oil, dist., bots. lb. 12.00 -14.00
Ginger oleoresin NF from African root, nots lb 4.25 5.00
NF from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs. lb. .20 - —
Jamaican, No. 3, bgs. lb. .26 - —
Nigerian, split, bgs. lb. .23 - —
Sierra Leone, bgs. lb. .32 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —

Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½ - —
164 jellygrams, bgs., c.l., same basis lb. .18½ - —
191 jellygrams, bgs., c.l., same basis lb. .19½ - —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½ - —
Glue, green, bone, 135 jellygrams, bgs., c.l., same basis lb. .17½ - —
164 jellygrams, bgs., c.l., same basis lb. .18½ - —
180 jellygrams, bgs., c.l., same basis lb. .19½ - —
200 jellygrams, bgs., c.l., same basis lb. .20½ - —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., same basis lb. .20½ - —
150-177, bgs., c.l., same basis lb. .22½ - —
178-206, bgs., c.l. same basis lb. .25 - —
207-236, bgs., c.l. same basis lb. .28 - —
237-266, bgs., c.l., same basis lb. .30½ - —
267-293, bgs., c.l., same basis lb. .32½ - —
299-330, bgs., c.l., same basis lb. .34½ - —
331-362, bgs., c.l., same basis lb. .36½ - —
363-394, bgs., c.l., same basis lb. .38 - —
395-427, bgs., c.l., same basis lb. .40 - —
428-460, bgs., c.l., same basis lb. .42 - —
461-494, bgs., c.l., same basis lb. .44 - —
495-529, bgs., c.l., same basis lb. .46 - —
Hide glue, l.c.l., prices 2c higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt. alld lb. 1.80 - —
fib. dms. 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo. 150.00 -300.00
Bots., 50-kilo lots kilo. 100.00 - —
Bots., 500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification 88%, tanks dlvd. lb. .13 - .13¼
nat., crude, soapiye 80%, tanks, dlvd. lb. .12 - .12¾
nat., refd., USP CP, 99%, dms., c.l., dlvd lb. .26⅜ - —
dms., l.c.l., dlvd lb. .27⅛ - —
tanks, dlvd. lb. .24⅜ - —
Dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. 25½ - —
dms., l.c.l., dlvd. lb. .26¼ - —
tanks, dlvd. lb. .23¾ - —
nat., high gravity, dms., c.l., dlvd lb. .26¼ - —
dms., l.c.l., dlvd lb. .27 - —
tanks, dlvd. lb. .24½ - —
Dom., refd., syn., 99.5% dms., c.l., dlvd lb. .26½ - —
dms., l.c.l., dlvd lb. .27¼ - —
tanks, dlvd. lb. .24¾ - —
Imp., nat. crude, soaplye, 80%, c.i.f. lb. .12 - .12¼
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine)
Glyceryl guaiacolate, 100-lb. fib. dm., dlvd lb. 4.00 - —
25-lb. fib. dm., dlvd. lb. 4.25 - —
Glycolic acid (see Hydroxyacetic acid).
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis lb. .42 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb. .20½ - —
dms., l.c.l., works lb. .21¼ - —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.90 - 3.00
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.25 - —
Grapefruit oil, dms o. 2.40 - 2.60
Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09¼
Cryst. 88-90% powd., bgs., fib. dms., ex whse lb. .19 - .21¼
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24¼
Cryst., 95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31¼
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd lb. .07½ - .07¾
Yellow, tanks, dlvd lb. .05⅛ - —
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .12 - —
dms., l.c.l., same basis lb. .14 - —
tankcars, same basis lb. .10½ - —
Grease oil, extra winter, strained, dms., c.l. Chicago lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tankcars, same basis lb. .13½ - —
Prime, burning, dms., c.l., same basis, Chicago lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tankcars, same basis lb. .15½ - —
Other areas ¼c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls lb. .40 - —
Guaiacol NF cryst. dms. tins lb 2.10 2.15
liq., cbys., dms. lb. 2.30 - 2.40
Guaiacwood oil cns lb .63 .80
Guaiacol carbonate NF VII dms lb 3.40 3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt lb. .38 - —
bgs., l.c.l. same basis lb. .40 - .42
Indust., bgs., c.l., same basis lb. .32 - —
Tech., bgs., c.l., same basis lb. .30 - —

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls, c.l., frt. alld., 100% basis lb. 1.00 - —
bbls., l.c.l. same basis lb. 1.05 - —
Hansa yellow 10 G, bbls., dlvd, E. of Rockies lb 2.45 — —
Hansa G yellow, pigment bbls lb 2.20 — —
Hawthorn berries, bgs lb .18 — .20
Heliotropin, 100-lb lots, dms. lb 2.60 3.40
Hellebore root, dom., green, bls lb 70 — .75
Helonias root, bls lb 1.50 — —
Hemlock oil, cns. lb 2.55 — 3.00
Henbane, leaves, bls lb. .40 - .45
Heptachlor, dms. c.l., t.l., frt. alld., 100% basis lb. .96 — —
Heptane, indust., tankcars, New Jersey and New York gal. .20 — —
Houston, Texas gal. .1625 - —

Hesperidin, purif., 50 kilos, f.o.b. works	kilo.	19.70 • —
Hesperidin methylchalcone, 50 kilos, f.o.b. works	kilo.	49.25 • —
Hexachlorophene, dms., 1,100 lbs. or more	lb.	1.84 • —
dms., to 1,100 lbs.	lb.	1.94 • —
Hexalin (see Cyclohexanol).		
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City	lb.	.233 • —
bgs., 1,000-19,999-lb. lots, same basis	lb.	.243 • —
bgs., smaller lots, same basis	lb.	.253 • —
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250 • —
fib. dms., smaller lots, same basis	lb.	.253 • —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia	lb.	.42½- —
bgs., smaller lots, same basis	lb.	.43½- .48½
Hexane, industrial, tankcars, New Jersey and New York	gal.	.20 • —
Houston, Texas	gal.	.16 • —
l-Hexanol, dms., c.l., works	lb.	.35 • —
dms., l.c.l., works	lb.	.35¾- —
tanks, works	lb.	.33 • —
Hexyl cinnamic aldehyde, dms.	lb.	3.95 • 4.00
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½- —
dms., l.c.l., works	lb.	.76 • —
Hexyl salicylate, dms.	lb.	1.70 • 1.75
Hexylene glycol, dms., c.l., dlvd.	lb.	.17½- —
dms., l.c.l., dlvd.	lb.	.19 • —
tanks, dlvd.	lb.	.15 • —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd	lb.	14.00 • —
dms., smaller lots, dlvd.	lb.	14.50 • —
Homatropine hydrobromide, USP, bots.	oz.	3.25 • —
methylbromide, USP, bots.	oz.	3.00 • —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago	unit-ton.	6.75 • —
Horehound herb, bls.	lb.	.18 • .20
Hydrastis (see Goldenseal.)		
Hydrazine hydrate, 85%, 240-lb. dms., c.l., works	lb.	1.28 • —
240-lb. dms., l.c.l., works	lb.	1.35 • 1.55
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works	lb.	2.92 • —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1	lb.	.29¼- —
dms., l.c.l., dlvd. zone 1	lb.	.29¾- .30¼
tanks, dlvd. zone 1	lb.	.27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.		
Hydrobromic acid, medicinal, 48%, cbys., frt. equald	lb.	.48 • .56
Hydrochloric acid, anhyd. (see Hydrogen chloride.)		
Hydrochloride acid, 18°, cbys., c.l., works	100 lbs.	2.50 • —
cbys., l.c.l., dlvd. Metropolitan area	100 lbs.	2.90 • 3.00
tanks, works, frt. equald	ton.	28.00 • —
20°, cbys., c.l., works	100 lbs.	2.75 • —
cbys., l.c.l., dlvd. Metropolitan area	100 lbs.	3.15 • —
20°, tanks, works, frt. equald	ton.	30.00 • —
22°, cbys., c.l., works	100 lbs.	3.25 • —
cbys., l.c.l., dlvd. Metropolitan area	100 lbs.	3.65 • —
tanks, works, frt. equald	ton.	35.00 • —
Hydrochloric acid, CP, USP, consumers, cbys, extra, c.l., works	lb.	.15¾- —
cbys, l.c.l., same basis	lb.	.17¼- .17¾
5-pint bots., extra cs, c.l., same basis	lb.	.20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more	gram.	.85 • .90
Hydrocortisone alcohol, bulk, bots., kilo lots or more	gram.	1.00 • 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works,	pint.	.70 • —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).		
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd.	100 lbs.	17.25 • —
55-gal. dms., l.c.l., l.t.l., dlvd.	100 lbs.	18.75 • —
20-gal. dms., c.l., t.l., dlvd.	100 lbs.	19.00 • —
20-gal., dms., l.c.l., l.t.l., dlvd.	100 lbs.	20.50 • —
tanks, works frt. equald	100 lbs.	11.50 • —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.75 per cwt. for drum delivery.		
Hydrofluosilicic acid, dms., works, 30% basis	lb.	.07 • —
Hydrofuramide, dms., fib. ctns., works	lb.	.30 • .40
50-lb. cyls., l.c.l., works	lb.	.55 • .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works	lb.	.45 • —
Hydrogen cyanide, liq., 98%, tanks, works	lb.	.13 • —
Hydrogen fluoride, annyd., cyls., dlvd. E	lb.	.29 • .31
cyls., dlvd. W	lb.	.37 • —
tanks, works	lb.	.16 • —
Hydrogen peroxide, 35%, dms., c.l., dlvd	lb.	202 —
dms., l.c.l., dlvd.	lb.	211 —
tanks, dlvd.	lb.	1800- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b works	lb.	1.10 —
Tech., dms., c.l., dlvd.	lb.	.82½ —
dms., l.c.l, dlvd	lb.	84½ —
Hydroquinone monomethyl ether, dms., t.l. dlvd	lb.	2.59 • —
dms., l.t.l., dlvd.	lb.	2.61 • —
Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago	lb.	.11 • —
tanks Belle W Va	lb.	073 —
Hydroxycitronellal, cns.	lb.	5.65 • 6.00
Hydroxyethyl cellulose, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point	lb.	.69 • —
fib. dms. 2,000 to 19,999-lb lots, same basis	lb.	.77 • —
Hydroxyethyl cellulose, fib., dms., 100 to 1,999-lb. lots, basis	lb.	.81 • —
fib. dms., smaller lots, same	lb.	1.01 • —
Hyoscine salts (see Scopolamine)		
Hyoscyamine hydrohromide, bots.	oz.	7.75 8.50
Hyoscyamine sulfate, bots	oz.	7.75 8.50
Hypophosphorous acid, purif., 50%, 10-cbys. f.o.b works	lb.	1.95 —
NF, 50%, 10-cbys., same basis	lb.	1.35 —

I

Ichthammol, NF, dms.	lb.	.75 • 1.05
Indigo (see Dyes, Coaltar, 1171 indigo, syn.).		

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isopropyl acetate
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oxidized cellulose

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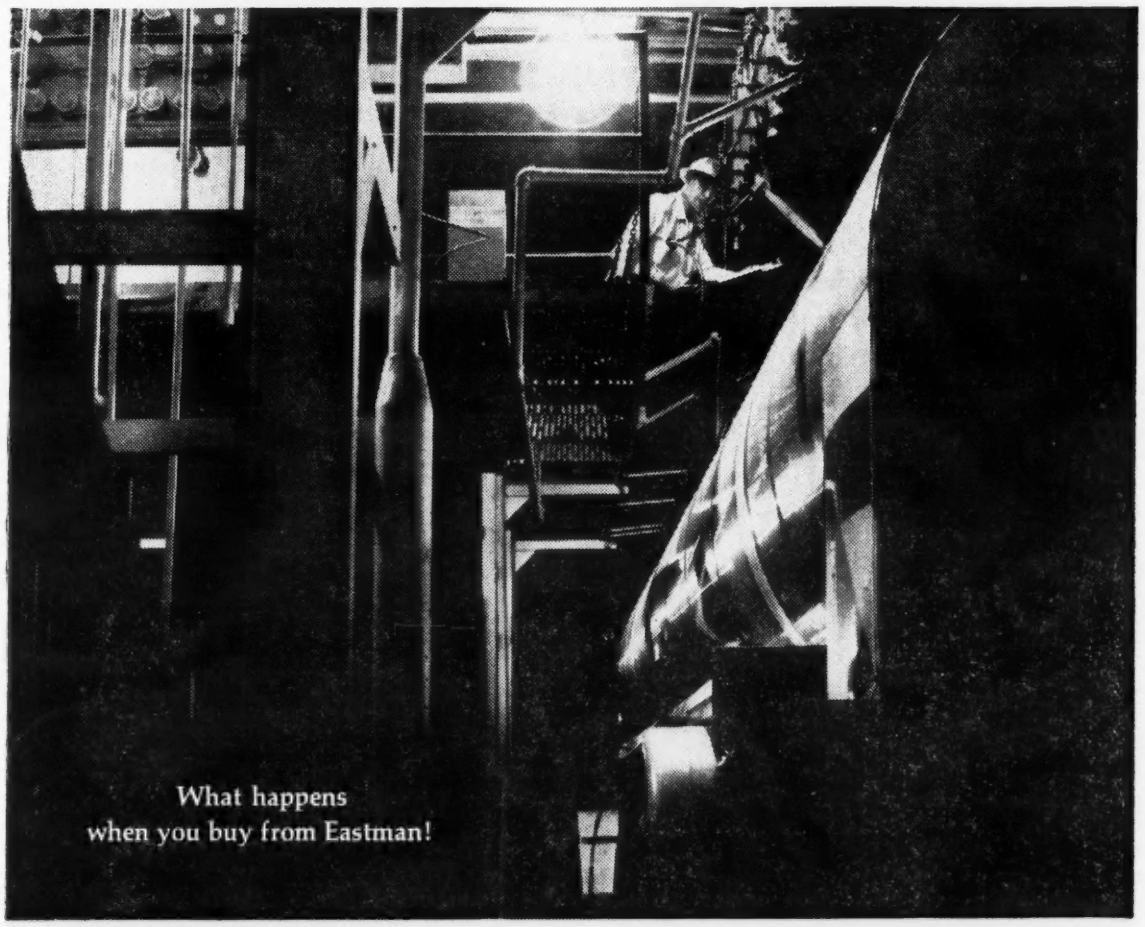

"The customer was wrong...but we were right on time"

...recalls production supervisor, Acid Division

"It started with a phone call from one of our regional sales managers asking about a tank car of acetic anhydride that hadn't arrived at the customer's plant.

"Seems they were in full production on their line of antibacterial drugs. Anhydride supplies were running low and the purchasing agent was getting pretty uneasy.

"Well, we turned to the files to see what had happened, but we couldn't find the order. So we searched again and then we re-searched. Found an old office procedure we never knew we had—but not a trace of the order.

"Our sales office called the purchasing agent back and with considerable embarrassment told him we had looked high and low but simply couldn't find any record of the order. The purchasing agent comes back with—'Of course you couldn't find the order. One of our *ex*-employees forgot to mail it. It's still here in the office.'

"Then he told us their production units would have to shut down if they didn't get delivery by 8:00 A.M. on the second morning. Could we help them out.

"By this time the day was well along and our loading crew had already gone to dinner. We located two tank trucks in a hurry and recalled the crew who loaded the anhydride (that's me leaning on the clipboard) and had sample analyses run immediately. With the help of our friends over at the Mason-Dixon truck terminal the shipment went out that night.

"The trucks had sleeper cabs and two drivers. Driving night and day, they covered the run of more than 800 miles in time to arrive at the customer's receiving platform the next night—well in advance of our customer's deadline."

A typical delivery? No! But typical of the interested personal service you can always expect when you buy from Eastman.

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis.
West Coast: Wilson & Geo. Meyer & Company, San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Indole, CP, bots ..... lb. 13.65 -15.00
Inositol, 50-100 lb, dms., 1,000 lbs. or more, dlvd lb. 4.50 - —
50-lb. dms., less than 1,000 lb., dlvd lb. 4.75 - —
10 lb. cns., 10-50 lbs., dlvd. lb. 5.00 - —
5 lb. bots., dlvd. ..... lb. 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. ..... lb. 1.10 - —
Resub., USP, dms., f.o.b. works lb. 2.20 - 2.22
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works lb. 4.90 - —
dms., 100-lb., same basis ... lb. 5.05 - —
a-Ionone, cns. ..... lb. 4.60 - 5.75
b-Ionone, cns. ..... lb. 4.15 - 6.15
Ipecac root, whole, bgs. ..... lb. 8.00 - 8.50
Powd., bbls., bxs ..... lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .35 - —
Iron blue alkali resisting, bbls., c.l., dlvd. E lb. .60 - —
bbls. l.c.l. ton lots same basis. lb. .61 - —
bbls., smaller lots, same basis. lb. .62 - —
Dom., reg bbls., c.l., dlvd E lb. .55 - —
alkali-resistant, dom., reg., bbls., c.l., ton lots, same basis lb. .56 - —
bbls. l.c.l. smaller lots same basis lb. .57 - —
Imp. British reg. bbls. c.l. dlvd. E lb. .48 - —
bbls. l.c.l. ton lots same basis lb. .49 - —
Iron blue, imp., British, reg., bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd prices to higher for Pacific Coast states Wash Ore., Cal. N M. Ariz., Mont Wyo. Utah Col and Nev
Iron compounds (see Ferric or Ferrous).
Iron oxide black pure bgs., c.l., works lb. .14¾- —
bgs. l.c.l., works lb. .15 — —
Iron oxide brown pure bgs., c.l., works lb. .14¼ —
bgs., l.c.l., works lb. .14½ —
Iron oxide metallic brown, bgs., works lb. .05½ —
Iron oxide Persian Gulf red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure bgs., Bethlehem, E St. Louis, New York City lb. .14¼ —
Iron oxide, red nat. 75-85% ferric oxide bgs., c.l., works lb. .06¼ —
bgs. l.c.l works lb .06½ —
Iron oxide Spanish red, bbls., c.l., ex dock lb. .05¾ Nom
bbls. l.c.l. ex dock lb. .06 Nom
bbls. l.c.l. ex whse New York. lb 06½ Nom
Iron oxide yellow nat., French type, bgs., c.l., works lb. .06¾ 07
Peruvian type bgs l.c.l lb 023 024
Iron oxide, yellow, pure, light lemon shade bgs c.l. works lb 12¼ —
other shades, same basis lb. .12 .12½
Isoamyl alcohol dms., c.l., works, frt. alld E lb 27½- —
Isoamyl alcohol, dms., l.c.l., same basis lb. .29 - —
tanks same basis lb 25 —
Isobornuol cns ..... lb 1.44 1.80
Isobornyl acetate cns ..... lb 46 56
Isobornyl formate, dms ..... lb 1.15 1.20
Isobornyl propionate, dms .... lb 1.20 1.25
Isobutyl acetate perfume grade cns lb. .30 .35
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb .16¾ —
tanks same basis lb. .12¾- —
Isobutyl alcohol dms., c.l., dlvd lb. .15½ —
dms., l.c.l., dlvd lb. .17 —
tanks, dlvd lb. .13 —
Isobutylene, 99% tanks, works gal. .38 —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, tech., dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. ..... lb. .23½- —
tanks, dlvd lb. .19½ —
Isobutyric acid, dms. c.l., t.l., dlvd. lb .35 — —
dms., l.c.l., t.l.l. same basis lb. .36½- —
t.c.l. t.l. same basis lb .33 —
Isobutyronitrile, d.ns., c.l., dlvd. lb. .47½- —
dms., l.c.l., dlvd ..... lb. .48½- —
tanks, dlvd ..... lb .45 —
Isoeugenol, cns. ..... lb 3.10 3.40
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 —
Isonicotinic acid, 100-lb tib. dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid)
Iso-octyl alcohol, dms. c.l., dlvd E. lb. .20½- —
dms., l.c.l., dlvd. E ..... lb. .22 - —
tanks, dlvd. E ..... lb. .18 - —
Isopentane, coml. grade, tanks, f.o.b Tex refy gal. .16¼ —
Isophorone, dms., c.l., dlvd. lb. .25 - —
dms., l.c.l., dlvd. ..... lb. .26½- —
tanks, dlvd ..... lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate dms., c.l., dlvd. lb. .14 — —
dms. l.c.l. same basis lb. .15½ —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd. gal. .68 - —
tanks, dlvd. gal. .42 - —
Isopropyl alcohol, 95%, c.l., dms., dlvd gal. .60 - —
dms., l.c.l., dlvd. gal. .70 - —
tanks, dlvd gal. .44 - —
Anhyd., c.l., dlvd ..... gal. .62 - —
dms. l.c.l. dlvd gal. .72 — —
tanks, dlvd gal. .46 — —
Isopropyl benzene (see Cumene)
Isopropyl ether, dms. c.l. dlvd lb. .09½- —
dms. l.c.l. dlvd lb. .11 — —
tanks, dlvd lb. .07 — —
Isopropyl N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l. works lb 1.00 —
dms., l.c.l. works lb 1.05 1.25
tanks works lb. .99 —
Isopropylamine (see Mono, Di, or Tri-)
Isopropyl-N-phenyl carbamate, 450-lb fib dms c.l., t.l., works lb. 75 —
450-lb fib dms. l.c.l. works lb 80 90
Isoquinoline, dms. works lb 65 1.25
Itaconic acid refd bgs c.l. f.o.b. works lb. .39½ —
bgs., l.c.l., same basis lb. .41 .43
Tech., bgs., c.l., same basis lb .34½- —
bgs., 500-lbs. same basis lb. .36 - —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis ..... lb. 2.75 - —
Jalap root, NF, bls ..... lb. .55 - .60
NF, powd., bbls., bxs ..... lb. .65 - .70
Japan wax, cs. ..... lb. .29 - .31
Juniper berries, bgs ..... lb. .25 - .30
Juniper berry oil, NF, bots. ... lb 2.90 - 3.75
Twice rectified, bots. ..... lb 3.25 - —
Juniper tar oil, NF, dms ..... lb. 42 - .60
Juniper wood oil, tech. cns. ... lb. .38 .55

K

Kaolin (see also Clay, China).
Kaolin NF, powd., fib dms ... lb. .10 .12
NF colloidal 50-lb bgs lb. 15½ .17½
Karaya gum, No 1, NF powd., bls lb .48 .50
No 2, powd, bbls. ... lb. .43 .45
No 3, powd, bbls. ... lb. .37 .40
Koch acid bbls., frt. alld., 100% basis lb. 1.00 —
Kola nuts, bgs. ..... lb. .11 - .12

L

L acid, bbls., works ..... lb. 1.25 —
Lacquer diluent petroleum, 140°F, 200°F b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston Texas gal. .16 — —
200 F-240°F b.r., tankcars, New Jersey or New York gal. .20 — —
Group 3 gal. .14125- —
Houston, Texas gal. .16 — —
Lactic acid, food processing, 50%, dms., c.l., t.l., dlvd. N.Y., Phila lb. .1986- —
dms. 20 or more, same basis. lb. .2036- —
dms., 5 to 19, same basis lb. .2086- —
dms., 1 to 4, same basis lb. .2136- —
Lactic acid, food processing, 80%, c.l., dms., same basis lb. .3336- —
dms., 20 or more, same basis. lb. .3386- —
dms., 5 to 19, same basis lb. .3436- —
dms., 1 to 4, same basis lb. .3486- —
Plastic grade, 50% c.l. bbls., works lb. .2740- —
bbls. 20 or more, works lb. .2790- —
bbls. 5 to 19 works lb. .2840- —
bbls., 1 to 4, works lb. .2890- —
Plastic grade, 80% bbls., c.l., works lb. .4625- —
bbls. 5 to 19 works lb. 4725- —
bbls 1 to 4 works lb. 4775- —
Tech., 44%, bbls., c.l., works. 100 lbs. 12.45 - —
bbls. l.c.l., works 100 lbs 12 85 - —
USP 85% clvys lb. 85 - —
Lactose, crystalline edible, bgs., 23,000-lb lots, frt equald lb. .14 - —
bgs., 6,000 lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots frt equald lb. 14¾ —
bgs., 200-lb lots, frt equald lb 15¼- —
Edible lactose in fib dms, ½c higher
ferment, grade, bgs., c.l., works. lb. .08¾- —
USP, reg., fib, dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib dms., 2,000 lb lots frt. equald lb. 22¼ —
200-1,880-lb lots frt. equald lb 22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.l.l. frt equald lb 19 19¾
Lady's slipper root, bls lb 3.00 3.50
Lamp black, bgs. c.l. works lb. .16 45
Lanolin, USP anhyd. 400-lb dms., works lb. .24 .28
USP, annyd., cosmetic, 400 lb. dms works lb. 26 .30
USP hydrous 400 lb dms., works. lb .20 —
Lard, cash, dms., Chicago ..... lb. .08175- —
Lard oil (see Grease oil).
Larkspur seed bgs ..... lb. .55 —
Laurel leaf oil dms cns. ..... lb 9.75 .12.50
Laurent's acid, bbls ..... lb. .87 - —
Lauric acid, pure, dms ..... lb. .30¼- .32¾
bags ..... lb. .28¾- .31¼
tanks ..... lb. .27¾- —
Lauryl alcohol, bots ..... lb 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb. 65½- —
dms. t.t.l. works lb 66 — —
Lavandin oil, 22-24% dms. ..... lb. 1.15 - —
Abrial, dms. ..... lb. 1.20 - —
Lavender flowers, medium, bls lb 55 .60
Ord bls lb 20 25
Select, bls lb 90 1.00
Lavender flower oil USP, French, 35-37% ester, cns lb 1.85 4.00
40-42% ester, cns. lb. 3.50 3.65
Spike, Spanish, cns lb 1.75 2.00
Lead acetate, NF cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls lb. 25½ —
gran, bbls lb. 26½- —
powd bbls lb. 26½- —
Lead arsenate acid powder, dealers, 3-50-lb bgs or any quantity frt alld on $150 or more lb .30½- —
1-lb bgs same basis lb .47 — —
Lead, blue, basic sulfate, bbls., c.l., shipt point frt alld lb .17 - —
bbls l.c.l same basis lb .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, 400-lb. fib. dms lb. .56 - —
Lead iodide NF V tars lb 3.82 - —
Lead linoleate, fused, 24% liq. Pb, dms lb. .21¼- —
Lead metal, prime, pigs, New York. lb. .11 — —
St. Louis lb. .1080- —
Lead monosilicate, bgs., c.l., works, frt equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq 16% Pb., dms dlvd lb. .19½- —
24% Pb. dms dlvd lb. .24¼ —
Solid, 47% Pb dms dlvd lb .31¾ —
Lead nitrate, tech., cryst., 400-lb. fib dms lb. .2675- —
Lead orthosilicate gel, 50-60% PbO_2, dms works lb. .29¾ .34½
Lead peroxide tech powd. bbls lb. .45 .50
Lead phthalate dibasic dms works. lb. .41 —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works frt equald, lb. .1375- —
bbls. l.c.l., same basis lb. .1475- —
97%, Pb_3O_4 or less, bbls., same basis lb. .1395- —
bbls., l.c.l., same basis lb. .1495- —
Lead, red, 98% Pb_3O_4, bls., c.l., same basis lb. .1410- —
bbls., l.c.l., same basis lb. .1510- —
Lead, resinate, precip., 23% Pb. dms., lb. .49 - —
Lead salicylate, normal dms. works lb. .46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate (eq. to 16% Pb, dms lb. .17¼- —
24% Pb, dms ..... lb. .21¼- —
Solid 30% Pb. dms ..... lb. .26¾- —
Lead white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs l.c.l same basis lb. .19 - —
Basic silicate, bgs., c.l., shipt. pt., frt. alld. lb. .16½- —
bgs., l.c.l., same basis lb. .17½- —
Lecithin, edible, tech, bleached, non-ret dms., c.l., works. lb. .14 - .15
non-ret dms. t.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret dms. c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works kilo. 14.20 - —
Lemon oil, USP, Calif., cns., dms. lb. 2.45 - 3.75
Messina, cns ..... lb. 4.00 - 6.50
Lemongrass oil, cns., dms ..... lb. 3.00 - —
dl-Leucine, dms., 1 kilo, works kilo. 50.00 - —
Licorice root gran. bls. lb .13 - —
Powd, bls ..... lb. .15 - .16
Whole bls. ..... lb. .09 - .10
Lignaloe wood oil, Mexican, cns. lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil lb. 1,500.00
Lime chemical (quicklime), bulk, c.l. 50,000 lbs. works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs. c.l. same basis ton. 18.25 - —
For New York delivery add $6.29 freight charge
Lime oil, dist., Mexican, dms. .... lb. 5.25 - 6.00
West Indian, dms. ..... lb. 5.25 - 6.00
Expressed, West Indian, dms lb 6.50 7.75
Lime salts (see Calcium)
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool ex bois de rose oil dms. lb. 2.45 4.25
Syn., 98-100%, dms., works lb. 3.20 - —
Linalyl acetate ex bois de rose, 90-92% dms lb. 2.65 4.50
96-98% dms lb 3.25 - —
Syn., 98-100%, dms., works lb. 3.20 - —
Lindane, 25% formulation to distributors dms. frt alld. lb. 1.35 - 1.50
99%, tech. to formulators, 250-lb. dms., 5,000 lbs., dlvd lb. 2.13 - —
100-lb dms, 5,000-lbs. dlvd lb. 2.15 - —
250-lb dms, less than 5,000-lbs. dlvd lb. 2.18 - —
100-lb dms, less than 5,000-lbs. dlvd lb. 2.20 - —
Linden flowers, with leaves bls lb. .35 - .40
Without leaves bls lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton. 59.50 - —
Extracted, 34% bulk, same basis.
Linseed oil, raw, dms., c.l., New York ton. 55.50 - —
dms, l.c.l., New York lb. .1880- —
tanks, f.o.b. Minneapolis lb. .1520- —
tanks, New York ..... lb. .1628- —
tankwagon, New York ..... lb. .1653- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acid, water white, dms lb. .2975- .31
Litharge, coml., powd. bbls., c.l., works, frt. equald lb. .1325- —
bbls., l.c.l., same basis lb. .1425- —
Lithium aluminum, hydride, lump, dms., works lb. 33.00 - 39.00
Lithium benzoate dms lb 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt equald lb 2.50 - —
Lithium carbonate, NF, dms., ton lots lb. .58 - —
dms., 1,999 lbs. or less lb. .64 - —
Tech., dms., ton lots ..... lb. .57 - —
dms., 1,999 lbs. or less lb. .63 - —
Lithium chloride CP, anhyd., dms., ton lots lb. 1.23½- —
Tech. anhyd. dms., c.l., t.l., dlvd, or works, frt alld lb. .87 - —
dms. l.c.l. same basis lb. .88 - .92
Lithium citrate NF dms. ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 1.75 - —
bbls., ton lots and more, dlvd lb. 1.85 - —
bbls., less ton lots, dlvd lb. 1.90 - —
Lithium hydride, powd., dms., 500-lbs lots or more, works. lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .54 - —
dms., l.c.l., frt. alld. ..... lb. .58 - —
Lithium manganite, dms. works lb. .95 1.05
Lithium nitrate, tech. dms., 100-lb lots lb. 1.15 1.25
Lithium salicylate dms. lb. 1.60 1.70
Lithium silicate dms., works lb. 1.10 1.20
Lithium stearate, dms. c.l., works, lb. .47½- —
dms, ton lots works lb. .48½- —
dms, less-ton lots, works lb. .53½- —
Lithium sulfate dms. 100-lb. lots. lb. 1.15 1.25
Lithium titanate dms., works lb. 1.15 1.25
Lithol red toner barium, bbls., works lb. 1.03 - —
Lithol-rubine red toner pure, bbls., works lb. 1.65 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone ord. bgs. c.l. dlvd E. lb. .08¾- —
bgs., l.c.l., dlvd. E lb. .09½- —
Titanated (high strength), bgs., c.l., dlvd lb. .11 - —
bgs. l.c.l. dlvd lb. .12 - —
Lobelia herb, bls ..... lb. .80 - —
Loheline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum powd. bgs. lb. .35 - .40
Lycododium, cs. lb. 2.50 - 3.00
l-Lysine monohydrochloride, 25-lb. dms. lb. 4.50 - —

M

Mace, Siauw, No. 1, bls. ..... lb. 1.30 - 1.35
No. 2, whole, bls. ..... lb. 1.20 - 1.25
siftings, bls. ..... lb. 1.15 - —
Mace oil, dist., cns., dms. ..... lb. 8.00 -10.00
Magnesia, calcined, tech. bgs., cns., frt equald lb. .25¾- .26½
Tech. syn., rubber grade, light, bgs., c.l. frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs. t.c.l., frt equald lb .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs., c.l., f.o.b Lunning, Nev ton. 39.50 - —
91%, bgs., c.l., same basis. ton. 49.30 - —
95%, bgs., c.l. same basis. ton 59.00 - —
USP, light, bgs. ..... lb. .36½- .37½
USP, heavy, bgs. ..... lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald ton. 86.25 - —
Deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ton. 46.00 - —
Magnesium bromide, 80-lb. dm., f.o.b. works lb. 1.15 - —
Magnesium carbonate, tech. bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l. frt equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt equald lb. .14 — —
bgs., l.c.l. frt equald lb. .15 16
- Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, annyd., 92%, flake or pebble, drums., c.l. works lb. .12¾- —
dms. t.c.l., works lb. .14 .15
hydrous, 99%, flake, bgs., c.l., works ton. 60.00 - —
bgs., t.c.l., works ton. 75 00 -100.00
Magnesium gluconate 100-lb dm., f.o.b works E lb. 1.42 - —
Magnesium hydroxide, NF powd., dms., 500-lbs or more, f.o.b works lb. .24½- .25½
Magnesium lauryl sulfate dms., c.l., frt alld lb. .22½- —
dms., t.l.l., frt alld lb. .23½- —
tanks, frt alld lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb lots or more, works lb .36 - —
pigs., 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, same basis lb. .59 - —
Magnesium nitrate, cryst., dms., works lb .29 - —
Magnesium oxide (see Magnesia calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs, t.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs. t.c.l., 5,000 lbs., 1 with-drawal 100 lbs. 3.10 - —
bgs. smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, powd., fib. dms., 5,000-lb. lots lb. .38 - —
fib dms. 1,000-lb lots lb. .40 - —
fib dms 100-lb lots lb. .45 - —
USP, micronized powd., dms., 500-lb. lots lb. .80 - —
Malachite green, straight, FTA, bbls., works lb. 5.30 - —
Malathion, dms., c.l. works lb. .89 - —
dms., l.c.l. works lb. .92 1.01
Maleic acid, cryst. powd. dms lb. .37¼- —
Maleic anhydride, dms c.l. frt. equald lb. .24 — —
dms. t.c.l. frt. equald lb. .25½- —
tanks frt equald lb .22½ — —
Maleic anhydride in bags ½c per lb. less
Malic acid, tech. dms lb. 50 —
Mandelic acid NF dms., 1,000-lb lots lb 2.35 - —
dms. smaller lots lb 2.40 2.50
Mandrake root, bls ..... lb. .42 - .48
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib dms, lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, burlap paper lined bgs., gross for net works ton. 148.00 - —
40,000 to 99,999-lb lots, paper bgs., same basis ton 144.50 - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, dms same basis ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher
Manganese gluconate, dms lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. 35 - —
Manganese hypophosphite NF dms. lb. 3.52 - —
Manganese linoleate, liq. 6% Mn, dms lb. .26½- —
Solid, precip., 8.2% Mn bbls lb. 41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd. E lb. .34½- —
dms., ton lots, dlvd E lb. .37 - —
dms., smaller lots, dlvd E lb. .39 - —
Manganese naphthenate, liq 6% Mn, dms., frt alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn dms lb. 29¼- —
Precip, 6½-7% Mn, dms lb. 43 - —
Manganese sulfate fertilizer grade, 65% $MnSO_4$, bgs c.l. dlvd S. E ton. 86.50 - —
bgs. t.c.l., dlvd S., E ton. 93.50 - —
75% MnSo4, 20-tons same basis ton. 85.00- —
Manganese tallate 6% dms. .. lb .26½- —
Manila copal gum, C. bgs ..... lb. .35 .39
DBB, bgs ..... lb .24½- .28
DK dust, bgs. ..... lb. .14 Nom.
MA soft, bgs ..... lb. .20 .24
WS, bgs lb. No stocks.
Mannitol, com'l fib dms ton lots, works lb. .60 — —
fib dms, to ton lots works lb. .62 - —
fib dms, single dm works lb. .65 - —
Marine pitch dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs. c.l., works ... lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP bots gram. .044 05
Menhaden oil, crude tanks, works, Atl. & Gulf ports lb. .05½- —
Menthol, nat USP Brazilian large crystals, cs lb. 7.40 - 7.60
Nat. USP Brazilian, regular crystals, cs lb. 7.30 - 7.50
Japanese, cs. lb. 10.25 -10.50
Syn. USP racemic, 25-lb lots lb 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms. ton lots works, frt. alld lb. .44 - —
bgs. fib dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib dms. less ton lots same basis lb. .56 - —
Mercuric chloride, NF, cryst. dms., 100 lbs., f.o.b works lb 4.03 - —
USP, gran or powd., 50 lb dm., 100 lbs., f.o.b. works lb. 3.78 - —

Mercuric cyanide, NF VIII, powd., fib. dms lb. 5.84 • —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb. 6.97 • —
Mercuric oxide, red, NF IX 50-lb. dm., 100 lbs. f.o.b. works, lb. 4.72 • —
tech., 50-lb dm., 100 lbs., same basis lb 4.52 • —
yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 4.89 • —
tech., dms., 100 lbs. lb. 4.35 • —
25-lb. fib. dm. lb. 4.38 • —
Mercurous chloride (see Calomel).
Mercury, ammoniated (see White precipitate USP XV)
Mercury metal 76 lbs. per flask, net-flask. 188.00 -190.00
Mesityl oxide dms., c.l., dlvd lb .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb 12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline)
Metanilic acid, dms., works lb. .57 • .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms. truckloads frt equald lb. .42½- —
dms. smaller lots frt equald. lb. .43 • .75
tanks works frt equald lb. .40 • —
Methanol, nat. denaturing grade, tanks frt alld gal. .85 • —
Syn., zone 1, dms., c.l., or t.l. min dlvd gal. .51½- —
dms. l.c.l. dlvd gal. .61½- —
Syn., tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 • —
tankwagon, 4,000 gal min., dlvd gal. .30 • —
tankwagon, 4,000 gal min., f.o.b terminal gal. .29 • —
Syn., zone 2, dms., c.l., t.l., min., frt. alld. or dlvd. gal. .55½- —
dms. l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd. Metropolitan area gal. .39 • —
tanks, 4,000 gal min. dlvd. gal .34 —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho Nev., Ore., Utah and Wash
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b works, frt. equald lb. 21.75 • —
Methapyrilene hydrochloride 100-999 lbs., dms., f.o.b works, frt equald lb. 27.25 • —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms. t.l., frt alld lb 1.10 • —
dms., t.t.l., same basis lb 1.16 • —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb 3.50 • —
Feed grade, 98% fib dms. same basis lb. 1.43 • —
Methoxychlor 50% wettable powder, dealers, dms. cs lb. .66 • —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret dms., t.c.l. same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd zone 1 lb. .23½- —
non-ret dms. t.c.l. same basis. lb .24 24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., t.c.l., E of Miss. frt alld gal .62½- —
Syn., dms., c.l., frt. alld. E gal. .60½- —
dms., t.c.l., frt. alld. E gal. 70½- —
tanks, frt. alld. E. gal. .44½- —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼- —
dms., t.t.l., dlvd lb. .36¼- —
tanks, dlvd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 • —
dms., t.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 • —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
dms., t.c.l., same basis lb. 2.00 • —
N-Methylaniline, tech., tanks, frt. alld lb. .60 • —
Methylanthranilate, cns. lb. 2.20 • 2.70
Methyl benzoate, cns., dms. lb. .60 • .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 • .72
on 100 lbs lb. .73 • .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 • —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 • —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 • —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfgs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. 67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 • —
dms., t.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12¼- —
5-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 • —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 • —
Methyl formate, refd., dms lb. .35 • .40
Tech., non-ret. dms., any quantity, works lb. .10 • —
tanks, works lb. .07 • —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .26 • —
100-lb. multiwall paper bgs., t.l., min 23,000 lbs., works, lb. .27 • —
100-lb. multiwall paper bgs., l.t.l., works lb. .28 • —

Methyl heptin carbonate, bots. lb. 27.25 -29.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 • —
dms., t.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 • —
dms., t.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald. with Belle, W. Va lb. .31 • —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 • —
Methyl naphthyl ketone, cryst., cns lb. 2.45 • 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate)
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 • —
Methyl parathion prices 2c per lb. higher in West
Methyl roseaniline chloride, NF., 5-lb fib dms lb 6.90 • —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., t.c.l., same basis lb. .62½- 67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb. 1.32 • —
5-39 dm. lots, same basis lb 1.37 • —
tanks, same basis lb 1.27 • —

Methyl violet toner, molybdated, PMA, bbls., dlvd. E of Rockies lb. 2.95 • —
Tungstated, PTMA, bbls., same basis lb. 4.35 • —
Methyl violet prices 1c higher W. of Rockies.
Methylene blue, NF, crystals, 100-lbs., frt. equald lb. 4.10 • —
Methylene chloride, tech., straight or assorted, dms. c.l. or t.l., dlvd lb. .12½- —
dms. t.c.l., t.t.l. dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .11¼- —
b-Methylnaphthalene .32° C., m.p., dms., works lb .90 —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 • —
roofing, 20 to 80 mesh, works lb. .03 • —
wet-grd., biotite, bgs., c.l., works, frt alld. E lb. .06½- —
bgs. t.c.l. ex-whse lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh works, frt alld E. lb. .08¼- —
bgs. t.c.l. ex-whse or freight alld. E lb. .09 • —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 • —
bgs., t.c.l., ex-whse, or frt. alld. E lb. .08¾- —

Mica, wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾- • —
bgs. ex-whse or frt. alld E. lb. .09 —
white, 5-10 microns, bgs., c.l., works, frt alld E lb. .08¼ —
Mica, wet-grd. W. of Miss. ½c higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 .11
laminating grades, tankcars, works lb. .11 .12
Mineral black, bgs. works ib. .0160 .0673
Mineral oil, white tech. 50-65 vis., non-ret. dms. c.l., f.o.b. refy gal. .70 • —
non-ret. dms., t.c.l., same basis gal. .75 • —
tankcars, refy. gal. .54 • —
65-75 vis., non-ret. dms., c.l., same basis gal. .70½- —
non-ret. dms. t.c.l., same basis gal. .75½- —
tankcars, refy. gal. .54½- —
NF, 80-90⅝ vis., non-ret. dms., c.l., same basis gal. .71 • —
non-ret. dms., t.c.l., same basis gal. .76 • —
tankcars, refy. gal. .55 —
135-138 vis., non-ret. dms., c.l., same basis gal. .77 • —
non-ret. dms., t.c.l., same basis gal. .82 • —
tankcars, refy. gal. .61 • —

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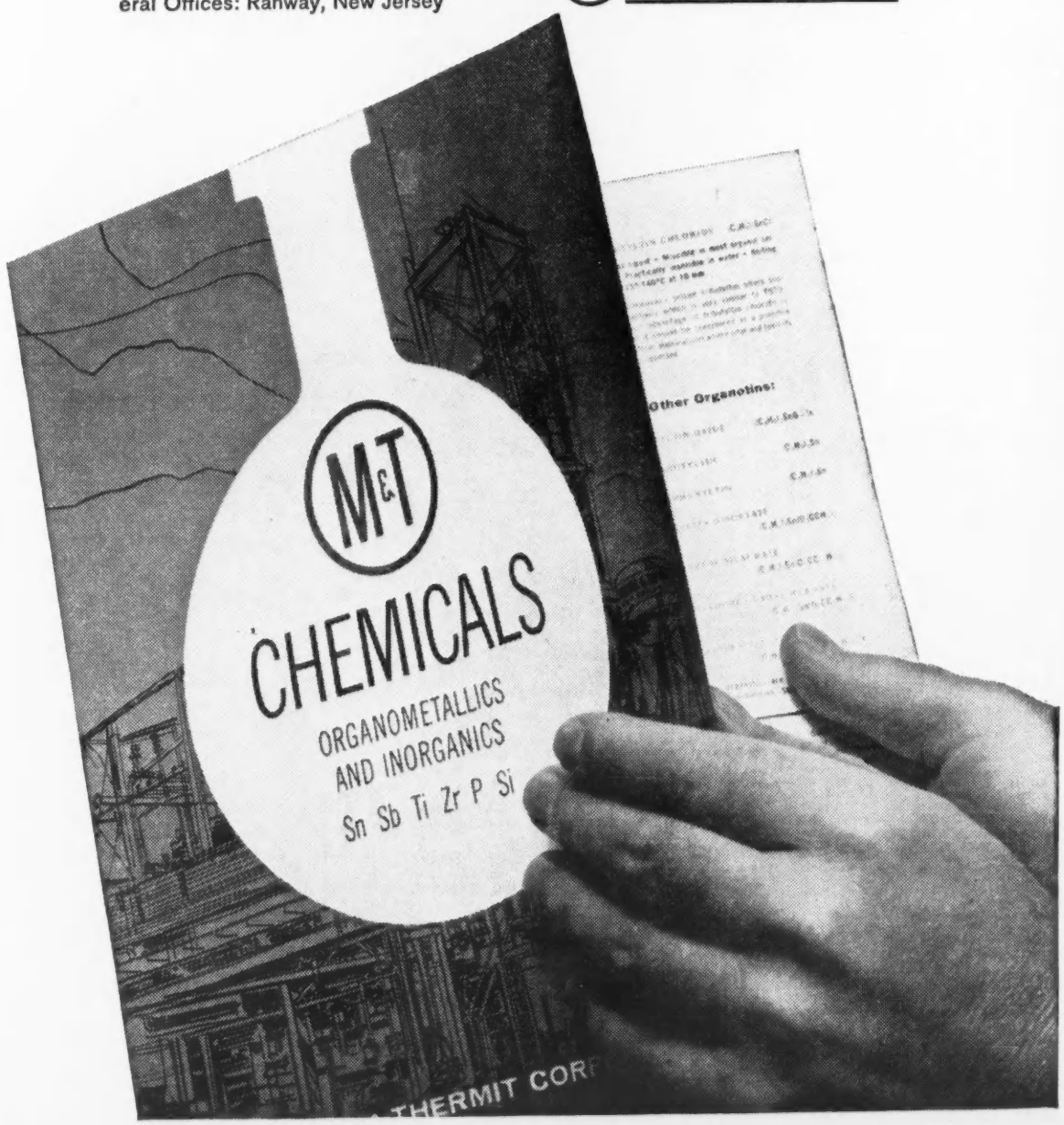


Mineral oil, NF, 145-155 vis., non-ret, dms., c.l., same basis gal. .83 - —
non-ret, dms., l.c.l., same basis gal. .88 - —
tankcars, refy. gal. .67 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .85 - —
non-ret. dms., l.c.l., same basis. gal. .90 - —
tankcars, same basis gal. .69 - —
200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .875 - .90
non-ret. dms., l.c.l., same basis gal. .925 - —
tankcars, refy. gal. .69 - .715
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy. gal. .92½- —
non-ret. dms., l.c.l. gal. .97½- —
tankcars, refy. gal. .76½- —
(For dlvd. N.Y. prices add 2c. for c.l. and 3c. for l.c.l.).
Mineral orange, American, bbls., c.l., works lb. .16 - —
bbls., l.c.l., same basis lb. .17 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston Texas gal. .145 - —
140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston Texas gal. .17 - —
Mink oil, dms. lb. 1.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner kgs., c.l., works lb 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .13 - .13½
tanks, New York gal. .15½- .16
Molybdated orange, bbls. lb. .40 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo 7.84 - —
325 mesh, ctns., works kilo 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.25 - —
Tech. chemical dms., works, basis Mo content lb. 1.61 - —
Tech. metallurgical, dms., works, basis Mo. content lb. 1.60 - —
Molybdic acid, 84% dms., works. lb. 1.15 - 1.25
Monoallylamine, dms., c.l., dlvd lb .365 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd lb. .96 - —
Monobutylamine, dms., c.l., dlvd E. of Rockies lb. .57½- —
dms., l.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. 55 - —
dms., l.c.l., works lb. 56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E lb. .10¼- —
dms., l.c.l., same basis lb. .11¼ - —
tanks, same basis lb .08¾ - —
Monochlorobenzene prices in the West 1¾c. higher.
Monoethanolamine dms. c.l. dlvd. E lb 27½- —
dms., l.c.l., same basis lb 29 - —
tanks, same basis lb 25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt equald., 100% basis lb. .30 - —
tanks, 100% basis lbs. .26 - —
30-35% soln., dms., c.l., frt. equald 100% basis lb. .36 - —
30-35% soln., dms., l.c.l. frt. equald, 100% basis lb. .36½- —
tanks, frt equald. 100% basis. lb. .26 - —
40% soln. dms. frt equald., 100% basis lb. .33 - —
dms., l.c.l. frt equald 100% basis lb. .33½- —
tanks, frt equald. 100% basis lb 26 - —
Monopentaerythritol, tech., ngs., c.l., dlvd lb. .29 - —
bgs., l.c.l. lb. .30 - —
Monopotassium glutamate, dms., 1,000 lb lots, frt alld lb 1.05 - —
dms. 100 lb lots, same basis lb 1.25 - —
Monosodium glutamate dms. dlvd lb. 1.02 - 1.07
Monosodium phosphate (see sodium phosphate, monobasic)
Montan wax, Calif., refd., bgs lb. .29 - .30
Imp., crude, Bohemian, bgs lb. .25 .26
German, bgs lb .25 .26
Morphine, cns. 100-oz. f.o.b. works oz 12.35 —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz 9.90 - —
Morphine sulfate USP, cns. 100-oz., f.o.b works oz 9.90 - —
Morpholine, dms., c.l., dlvd E lb 55¼- —
dms., l.c.l., dlvd. E lb. .56¾- —
tanks, dlvd E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib, dms., 100-lb lots lb 4.40 4.90
cns., 25-lb lots lb 4.50 5.00
Ketone, fib, dms., 100-lb lots lb 4.60 5.10
cns. 25-lb lots lb 4.70 5.20
Xylol, fib, dms., 100-lb lots lb 1.26 —
cns. 25-lb lots lb 1.40 —
Mustard seed, Danish, yellow, bgs. lb. .09 - .09½
Montana, yellow, bgs lb. 10½- —
Oriental, bgs. lb. .09 - —
Mustard, oil, syn., bots. lb. 1.60 1.85
Myristic acid, bgs lb. .23¼- .25¾
tanks lb. .22¼- —
Myrrh gum, cs. lb 65 75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Naphthalene, crude, dom., 78°, tanks, f.o.b., frt. equald lb. .06¼- .06½
Refd., indust., chipped, crushed, bgs., frt. equald lb. .14½- —
tanks, same basis lb. .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers,, bbls., c.l., same basis lb. .15½- —
cs., 50 lbs. c.l., same basis. lb. .15¾- —
1-lb. pkgs. c.l., same basis. lb. .18½- —
a-Naphthol, dms., frt. alld lb. 1.02 - —
b-Naphthol, tech. flake bbls., c.l., works lb. .34 - —
bbls., l.c.l., works lb. .36 - —
Naphthol, ITR, red toner, bbls., works lb 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid)
1-Naphthol-5-sulfonic 8-amino acid (see S acid)
2-Naphthol-6,8 disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms., frt. alld lb. .52 - —
b-Naphthylamine tech. flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)
2-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib dms lb. 8.50 —
Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen USP dms., frt. adjusted lb 7.00 8.00
Neomycin sulfate, fib dms., 1 kilo basis activity gram, .18 - —
fib dms., 100-999 gram lots, basis activity gram. .25 - —
Tech. fib dms gram. 13½- —
Neopentylglycol dms., c.l., dlvd lb. .32 —
dms. l.c.l. same basis lb .33 —
Nerol, dms lb 4.75 —
Neroli oil, NF, French, bots lb. 425.00 575.00
Tunisian, bots lb. 400.00 —
Nerolin, cns lb 2.45 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.50 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .72 - .79
Nickel carbonate, bbls., dlvd lb. .83 - .90
Nickel chloride, bbls., dlvd. lb. .39½- .47½
Nickel formate, bbls, ton lots, frt. alld lb. .78 - .79
Nickel metal, electro cathodes, cs., works lb. .81¼- —
Nickel nitrate, dms., frt. alld lb. .34½- .36½
Nickel oxide, black, bbls. lb. .92 - —
Green, bbls. lb. .91 - —
Nickel sulfate, bgs., c.l., dlvd lb. .30 - —
bgs., l.c.l., dlvd. lb. .30½- .38
Nicotinamide, USP, 50-kilo, dms., frt. equald kilo. 5.75 - —
dms., smaller lots, same basis. kilo. 5.85 - 6.05
Nicotinamide hydrochloride, 50-kilo dms., dlvd kilo. 6.50 7.50
Nicotine sulfate 40% dealers, 50-lb. dms frt alld lb 1.20 - —
40% manufacturers, 500-lb. dms., frt alld lb 1.05 - —
Nicotinic amide, USP (see Nicotinamide)
Niger seed, bgs. lb 10¼- —
Nikethamide, cbys. lb 5.00 —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 —
cbys., l.c.l., works E 100 lbs 6.05 6.85
38° Be., cbys. c.l., works E. 100 lbs 6.25 —
cbys., l.c.l., works E 100 lbs 6.55 7.35
40° Be., cbys., c.l., works E 100 lbs. 6.75 —
cbys., l.c.l., works E 100 lbs 7.05 7.85
42° Be., cbys., c.l. works E. 100 lbs 7.25 —
cbys., l.c.l., works E 100 lbs 7.55 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs 4.90 - —
Nitric acid CP, NF consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra l.c.l. works. lb. .20 - —
5-pint bots. extra cs. c.l. same basis lb. 22½- —
5-pint bots. extra cs. l.c.l., same basis lb. .24 .25
dms. frt alld lb. .99 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 - —
Paste, dms., frt. alld., 100% basis 1.10 - —
o-Nitroaniline, flaked dms. t.l., frt. alld lb. .49 - —
dms. t.l. frt alld lb .51 - —
o-Nitroaniline orange toner kgs. 1.50 - —
p-Nitroaniline c.l., t.l., dms., 20,000 lb. min., dlvd lb. .44½- —
dms. l.c.l., same basis lb. .46½ —
o-Nitroanisole tech. tanks frt alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt alld lb. .72 - —
Nitrobenzene, dbl dist., dms. c.l., frt alld lb. .13 —
dms., l.c.l., frt. alld. lb. .14 - —
tanks, frt. alld. lb. .12 - —
p-Nitrobenzoic acid, dms., c.l., t.l., works lb. .53 - —
dms., l.c.l., works lb. .54 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼ ½ ¾ 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .39½- —
bbls., l.c.l., same basis lb. .42½- —
18-25 cps., bbls., c.l., same basis. lb. .41½- —
bbls., l.c.l., same basis lb. .44½- —
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .44½- .47½
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .44 - —
bbls., l.c.l., same basis lb. .47 - —
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .46 - —
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .18 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., t.l. lb. .71 - —
dms., l.t.l. lb. .73 - —
Nitroethane, dms., c.l., dlvd. E lb. .28½- —
dms., l.c.l., dlvd. E lb. .30 - —
tanks, dlvd E lb. .26 - —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton. 1.64 - —
Manufacturing type, same basis, unit-ton. 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls. t.l., min 5 tons, same basis lb. .07½- —
Cyls., l.c.l., t.l.l. same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton 4.50 5.00
Nitrogenous sewage sludge bulk, f.o.b. Chicago works. unit-ton 3.50 —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane, dms., t.l., dlvd. E lb. .26 - —
dms., l.t.l., dlvd. E lb. .27½- —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms. c.l., frt. alld. lb. .45 - —
dms. l.c.l. frt alld lb. .47 - —
1-Nitropropane dms. c.l., frt. alld. E. of Rockies lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tanks, same basis lb. .26 - —
1-Nitropropane prices West of Rockies are 1c per lb higher
2-Nitropropane dms. c.l., frt. alld. E of Rockies lb. .18½- —
dms., l.c.l. same basis lb. .20 - —
tanks, same basis lb. .16 - —
m-Nitrotoluene tech., dms. frt. alld. lb. .50 - —
o-Nitrotoluene dms. c.l., frt. alld lb .15 - —
dms. l.c.l., frt alld. lb. .16 - —
tanks, frt. alld lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms. l.c.l. works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms. l.c.l. works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms. c.l. frt. alld. lb. .22½- —
dms., l.c.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .20 - —
Nonylphenol prices on shipments to Western States are 2c. higher
Noscapine, cns. oz. 8.00 - —
Nutmegs East Indian, whole, bgs. lb. 1.20 - —
West Indian, bgs. lb. .98 - .99
Nutmeg oil USP dist., East Indian, cns lb. 8.00 -12.00
West Indian, cns. lb 9.00 -12.00
Nux vomica, bls. lb .20 —
Powd., bbls., bxs. lb. .20 .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .44 - .47
Octane, indust., tanks, Bayonne, N.J gal. .20 —
1-Octanol, tech., dms. c.l., dlvd., Zone 1 lb. .41½- —
dms., l.c.l., dlvd. Zone 1 lb. .43½- .44½
tanks, dlvd. Zone 1 lb. .37½- —
Octyl alcohol, perfumers grade, bots. lb. 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech)
n-Octyl-decyl alcohol blend, tanks, dlvd lb. .19 - —
tert-Octylamine dms., c.l., t.l., f.o.b. works lb. .54½- —
dms l.c.l same basis lb .55 - —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., l.c.l., works lb. .23 - —
tanks, works lb. .21½- —
Octylphenol in dms., 1lc. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liquid, dms. lb. .16 - .16¼
tanks lb. .14¼- .14½
Oleic acid, dbl.-dist. (white), dms. lb. .18½- .21
tanks lb. .16 - —
S. D., dms. lb. .17½- .20
tanks lb. .15 - —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 .20
Tears, cs. lb. .22 .30
Olibanum oil, bots lb. 5.00 7.65
Extra fine, bots lb. 8.00 9.50
Olive oil, edible, dms., spot, ex whse. gal. 2.35 - 2.40
Olivine, crude, works ton. 12.00 - —
20 mesh, works ton. 15.00 - —
100 mesh works ton. 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs., same basis oz. 21.65 - —
powd., cns. 50 lbs. same basis oz. 21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .80
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms lb .40 .45
Messina, cns. lb. 3.25 5.00
West Indian, bitter, cns., dms lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb. .28 .30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb 1.80 2.30
Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd. bbls. bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram. 3.00 4.00
Ouricury, wax, crude, bgs. lb. .50 - .52
Refd., pure, bgs. lb. .53 - .55
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb higher.
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

P

Palm oil, clarif., dms lb. .14¾- .15¼
tanks, New York lb. .12 - —
Palm oil acid, double dist, dms. lb. .16½- .19
tanks lb. .14 - —
single dist., dms. lb. .16 - .18½
tanks lb. .13½- —
Palmarosa oil, cns. lb. 5.25 - 6.50
Papain, powd., bots. lb. 3.25 -10.00
Papaverine hydrochloride, nat. or syn., USP cns., 25-oz. to 100-oz. lots oz. 5.00 —
cns., smaller lots oz. 5.05 5.20
Papaverine sulfate, nat., or syn., USP, cns oz. 7.10 - 7.35
Paprika, Bulgarian, bgs lb. .32 - —
Hungarian, bgs. lb. .33 - —
Spanish, bgs. lb. .33 - .38
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- .0660
Fully refd., 122°-124°F., ASTM, lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134° F., ASTM, tanks, refy. 135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .17½- —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91% powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. f.o.b., works lb. .19 - —
fib. dms., 1,000-lb. lots, same basis lb. .20 - —
fib. dms., smaller lots, same basis lb. .21½- —
Paraldehyde tech., 98%, 55-gal. dms., t.l., dlvd. E lb. .14 - —
55-gal. dms., l.c.l., dlvd. E lb. .15½- —
tanks, dlvd. E lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion ethyl, dms. frt. alld lb. .84 —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide)
Passion flower herb, bls lb .35 .40
Patchouli oil, imp., cns. lb. 5.00 - 5.60
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb. 1.00 —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b. mills ton. 62.00 - —
solvent, same basis ton. 60.00 - —
Peanut oil crude, tanks, t.o.b. mills. lb. .19 - —
Refd., dms. lb. .24¼- .24½
tanks lb. .22¼- —
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt pt. kilo. 4.52 —
Pelargonic acid, dms., c.l., dlvd. E lb. .27½- —
ton lots, same basis lb. .28½- —
tanks, same basis lb. .25 - —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .018 - —
Penicillin, procaine cryst., bulk, 1,000,000 units. .020 - —
Pennyroyal oil, USP imported, cns. lb. 2.35 - 2.80
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½- —
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .29 - —
bgs., l.c.l., dlvd lb. .30 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex refy. gal. .14 —
Pentobarbital, dms. 100 lbs. or more lb. 6.00 —
Pepper, black, Malabar, bgs lb. .45½- —
Lampong, bgs. lb. .45 - —
Red, Funtuas, bgs. lb. .30 - .31
Japanese, Hontoka, bgs lb. .40 - —
Santaka, bgs. lb. .30 - .31
Sudanese, bgs. lb. .52 - .56
White, Muntok, bgs lb. .57 - —

		No stocks.	
Peppermint leaves, dom., USP, bls., dms	lb.	.85	.90
imp., USP, dms.	lb.	.85	.90
Peppermint oil, nat., dms.	lb.	4.00	4.40
Redist., USP, dms	lb.	4.25	4.65
Perchloroethylene, dms., c.l., or t.l., dlvd	lb.	.13½	—
dms., l.c.l., dlvd.	lb.	.15¼	—
tanks, dlvd.	lb.	.11¾	—
tanktruck, 1,000 gal. min. dlvd	lb.	.12¼	—
Peri acid, dry bbls., frt. alld	lb.	1.60	—
Paste, bbls., frt. alld	lb.	1.55	—
Peru balsam, dms	lb.	1.15	1.50
Persic oil, USP (see Apricot kernel oil).			
Petitgrain oil, South American, cns., dms	lb.	2.45	—
Petrolatum, NF, cream, dms., c.l., refy	lb.	.085	.08625
dms., l.c.l., dlvd	lb.	.11125	.11250
tanks, refy.	lb.	.0625	.06375
NF, extra amber, dms., c.l., refy.	lb.	.07625	—
dms., l.c., dlvd	lb.	.1025	—
tanks, refy.	lb.	.05375	—
NF, soft yellow, dms., c.l., refy	lb.	.07625	—
dms., l.c.l., dlvd.	lb.	.1025	—
tanks, refy.	lb.	.05375	—
USP, lily white, dms., c.l., refy	lb	.09125	.09675
dms., l.c.l., dlvd	lb.	.1175	.1225
tanks, refy	lb.	.0 375	—
USP, snow white, dms., c.l., refy.		.09625	—
dms., l.c.l., dlvd.	lb.	.1225	—
tanks, refy.	lb.	.07375	—

Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.

Petroleum pitch (see Asphalt, petroleum).

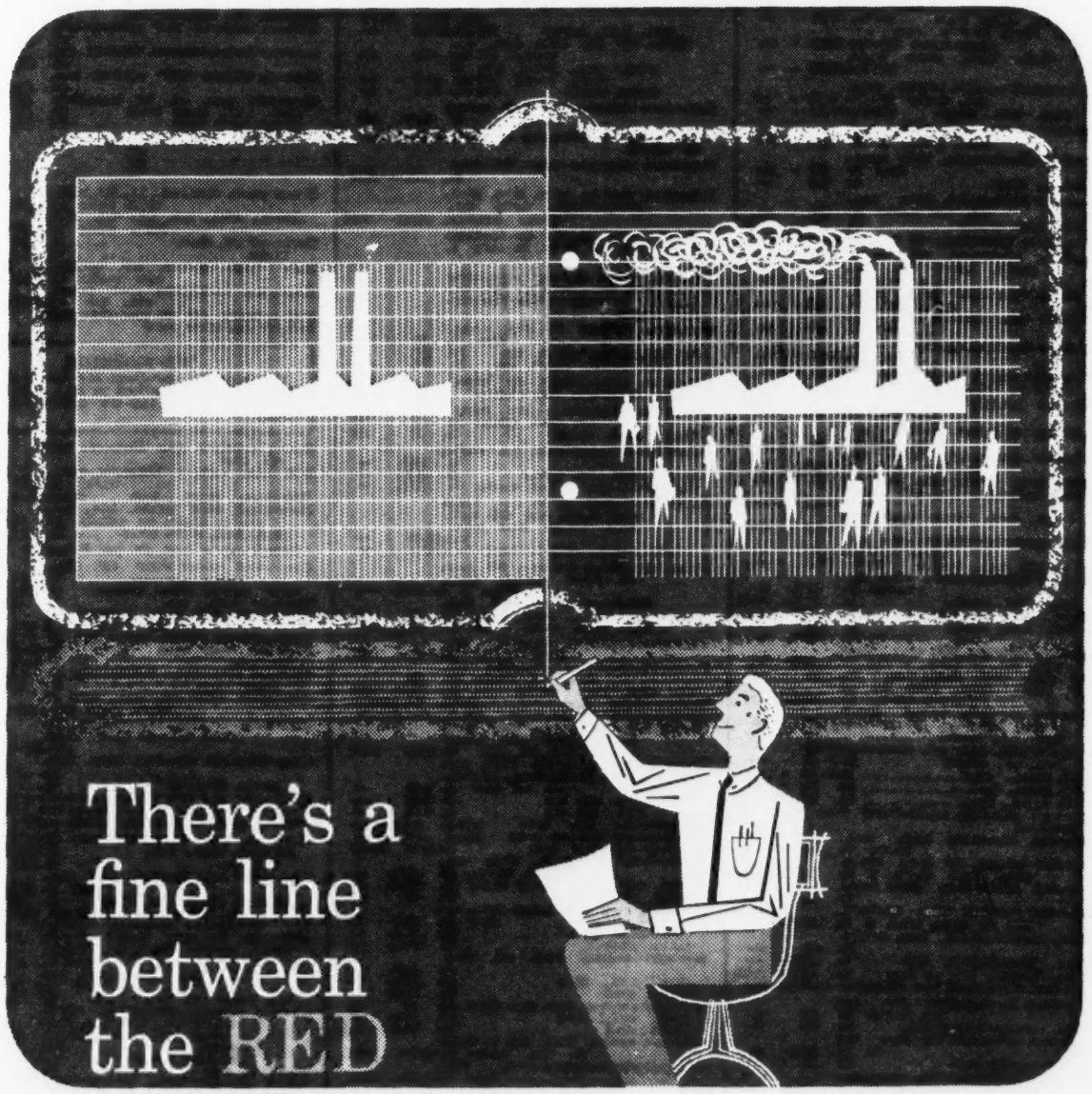
PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works.	lb.	.16½	.18¾
non-ret. dms., l.c.l., works	lb.	.17½	.19
tanks, works	lb.	.14½	.17
50-55% sulfuric content, non-ret. dms., c.l., works	lb.	.16	—
non-ret. dms., l.c.l., works	lb.	.17	—
tanks, works	lb.	.13	—
o-Phenetidine, dms., c.l., frt. alld. E	lb	.91	—
dms., l.c.l., same basis	lb	.93	—
p-Phenetidine, dms., c.l., frt. alld.	lb	1.05	—
dms. same basis	lb	1.08	—
Phenobarbital, USP, dms., 100-lbs., frt. alld	lb.	2.85	3.23
Phenobarbital-Sodium (see sodium phenobarbital)			
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld E. of Rockies	lb.	.16½	—
non-ret. dms., l.c.l., same basis.	lb.	.17½	—
tanks, same basis	lb.	.14½	—
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis	lb.	.16¼	—
non-ret. dms., l.c.l., same basis.	lb.	.17¼	—
tanks, same basis ⅝lb.		.14¼	—
39°C., or above, tar dist., non-ret. dms., c.l., same basis	lb.	.17¾	—
non-ret. dms., l.c.l.	lb.	.18¾	—
tanks, same basis	lb.	.15¾	—
Phenol, USP, syn., dms., c.l., t.l., frt. alld.	lb.	.18¼	—
dms., l.c.l., same basis	lb.	.20¼	—
tanks, same basis	lb.	.16¼	—
Phenolphthalein, USP or yellow, 250-lb dm., 2,000 lbs., frt. alld	lb.	1.30	—
250-lb dm., same basis	lb.	1.35	—
Phenothiazine drench, fib dms., t.l., dlvd	lb.	.46	—
fib. dms., ton lots, dlvd	lb.	.49	—
NF, fib dms., t.l., dlvd	lb.	.45	—
fib. dms., ton lots, dlvd	lb.	.48	—
Phenyl acetate, dms., 100-lb. lots, works	lb	.50	—
Phenyl salicylate (see Salol).			
Phenylacetaldehyde, soln., 50%, bots	lb.	2.15	2.35
100%, bots.	lb	3.80	4.00
Phenylacetic acid, pure, cryst., cns	lb	1.25	1.75
dl-Phenylalanine, dms., 1-kilo	kilo.	65.00	—
1-Phenyl-3-carbethoxy pyrazolone-5, fib dms., 200-lb. lots, dlvd. E	lb.	3.45	—
fib dms., smaller lots, dlvd E	lb.	3.80	—
N-Phenyldiethanolamine, dms., c.l., dlvd E	lb.	.50	—
dms., l.c.l., dlvd. E	lb.	.51½	—
tanks, dlvd. E	lb.	.47½	—
m-Phenylenediamine, dms., c.l., t.l., frt. alld	lb.	1.08	—
l.c.l., l.t.l., same basis	lb.	1.10	—
o-Phenylenediamine, comi, fib, dms, 100 to 1,000 lbs., works.	lb.	1.70	1.80
p-Phenylenediamine, tech., dms, works	lb	1.55	—
Phenylethanolamine, dms., c.l., works	lb.	.75½	—
dms., l.c.l., same basis	lb.	.76¼	—
Phenylethyl acetate, bots.	lb.	1.25	1.40
2-Phenylethyl alcohol, extra, dms.	lb.	1.14	1.50
Standard, dms	lb	1.10	1.60
b-Phenylethylamine dms., 20,000 lbs. or more, frt. alld	lb.	1.50	—
dms. smaller lots, frt. alld	lb	1.70	1.85
Phenylethylphenyl acetate, bots	lb	4.00	4.25
Phenylglyconic acid (see Mendelic acid).			
Phenylhydrazine 97%, 450-lb. dms.	lb	1.45	—
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E.	lb.	1.80	—
fib. dms., smaller lots, dlvd E	lb.	2.10	—
o-Phenylphenol, dms., l.c.l., works.	lb.	.48	.50
p-Phenylphenol, bgs., c.l., works	lb.	.38½	—
bgs., l.c.l., works	lb.	.43	—
Philippine copal gum, pale, chips, bgs	lb.	.23¼	.27
nubs, bgs.	lb.	.33¼	.37
seeds, bgs.	lb.	.20	Nom.
sorts, bgs.	lb.	.20	.24
Phloroglucinol, coml., fib. dms., works	lb	6.40	—
CP, bots., works	lb.	17.75	—
Tech., fib dms. works	lb.	10.45	—
Phloxin red toner (see Eosin red toner).			
Phosgene, ret. cyls., works	lb.	.15½	—
Phosphate, defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports, New Orleans	ton.	46.50	—
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines.	short-ton.	4.989	5.398
68-70%, b.p.l., bulk, c.l., same basis	short-ton.	5.849	5.858
70-72%, b.p.l., bulk, c.l., same basis	short-ton.	6.429	6.438
74-75%, b.p.l., bulk, c.l., same basis	short-ton.	7.329	7.338
76-77%, b.p.l., c.l., bulk, same basis	short-ton	8.219	8.228

Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64.

Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald	100 lbs.	7.00	—
cbys., l.c.l., same basis	100 lbs.	7.25	7.75
tanks, t.w., works	100 lbs.	5.60	—
80%, cbys., c.l., frt equald	100 lbs.	7.85	—
cbys., l.c.l., works	100 lbs.	8.10	9.35
tanks, t.w., works	100 lbs.	6.00	—
NF, 85%, cbys., c.l., works.	100 lbs.	8.50	—
cbys., l.c.l., works	100 lbs.	8.75	9.00
tanks, t.w., works	100 lbs.	6.65	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.55	—
dms., smaller lots, works	lb.	.56	.57
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
dms., l.c.l., works, frt. equald	lb.	.21½	—
tanks, works, frt. equald,	lb.	.19	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15	—
tanks, works, frt. equald	lb.	.12½	—
Phosphorus pentasulfide, powd., dms., c.l., works	lb.	.13½	—
dms., l.c.l., works	lb.	.14½	.15½
Solid, dms., c.l., works	lb.	.11½	—
dms., l.c.l., works	lb.	.12½	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1375	.1475
dms. l.c.l., works	lb.	.1475	.1675
Phosphorus sesquisulfide, dms., cs., c.l., works	lb.	.38	—
dms., l.c.l., works	lb.	.39	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15	—
tanks, works	lb.	.12½	—
Phthalic anhydride, bgs., c.l., works, frt. equald	lb.	.18	—
bgs., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.17½	—
Phthalimide, 97-98%, dms., frt. alld	lb.	.65	—
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies.	lb.	2.90	—
Resinated, bbls., same basis	lb.	2.75	—
Water dispersable, bbls., same basis	lb.	1.52	—
Phthalocyanine blue prices 1c. higher W. of Rockies.			
Phthalocyanine green toner, bbls., works	lb.	3.35	—
Resinated, bbls.	lb.	3.00	—
Water dispersable, bbls.	lb.	1.71	—
Phthalocyanine green prices 1c. higher W. of Rockies.			
Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more	lb.	5.00	—
NF, fib. dms.	lb.	5.20	—
a-Picoline, dms., c.l., works, frt. equald	lb.	.46	.48
dms., l.c.l., same basis	lb.	.46½	.49
tanks, same basis	lb.	.43	.46
b-Picoline, 98%, dms., t.l., works.	lb.	1.05	—
dms., l.c.l., same basis	lb.	1.15	—
tanks, same basis	lb.	.95	—
b,g-Picoline, 5°C, dms., c.l., works.	lb.	.32½	—
dms., l.c.l., works	lb.	.33	—
g-Picoline, dms., f.o.b., works	lb.	1.60	—
tanks, t.l., same basis	lb.	1.50	—
Picric acid, NF, bbls.	lb.	.85	—
Tech., bbls.	lb.	.50	—
Pigment green B, kgs	lb.	1.53	—
Pilocarpine hydrochloride, USP, bots	oz.	4.75	5.25
Pilocarpine nitrate, USP, bots., vials.	oz.	4.65	5.15
Pimento, Jamaican, bgs.	lb.	.69	.72
Mexican, bgs.	lb.	.61	—
Pimento berry oil, NF, dms.	lb.	3.75	9.25
Pimento leaf oil, crude, cns	lb.	2.50	2.60
Pine oil, dest.-dist., dms., l.c.l. works	lb.	.15	—
dms., l.c.l. ex whse. New York.	lb.	.173	—
Steam-dist., dms., ex whse., New York	lb.	.185	—
dms., dlvd.	lb.	.188	—
Pineneedle oil, Siberian (see Abies Siberica oil).			
Pink root, bls.	lb.	2.25	—
Piperazine, anhyd., dms., c.l., frt. alld. E	lb.	1.80	—
dms., l.c.l., frt. alld. E	lb.	1.85	—
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld	lb.	1.33	—
Piperazine dihydrochloride, 51%, dms., 1,000 lbs or more, frt. alld	lb.	1.29	—
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.90	—
dms., 200-900 lbs., frt. alld	lb.	.93	—
Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld	lb.	1.11	—
Piperidine, dist., 98% min., 5 dms. or more, l.c.l., l.t.l., f.o.b. works	lb.	2.63	—
1-4 dms., same basis	lb.	2.70	—
dms., c.l., t.l., frt. equald	lb.	2.55	—
Piperonyl butoxide, dms., dlvd. E.	lb.	4.50	5.05



Occasionally the difference between a prospering business and a losing one is a unique idea or process. Equally important to thriving chemical users are competitive advantages obtainable from PITT-CONSOL — an abundant source of raw materials, consistent product quality, technical assistance, prompt delivery. PITT-CONSOL — a flexible subsidiary of a larger company, can adapt to your specific needs.

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PITCHES
Pitch quotations are listed individually. For example, prices on Pitch, coaltar, may be found in the C's under Coaltar pitch.

Platinum metal, works ..... oz. 81.00 -85.00
Pleurisy root, bls. ..... lb. .45 .50
Podophyllum resin, NF, dms ... lb. 12.50 -15.50
Poke root, bls. ..... lb. .19 .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works lb. .42 - —
dms., 10,000-20,000-lb lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .23½- .26
Nubs, bgs. ..... lb. .38 - .44
Poppy seed, Argentine, bgs. .. lb. No stocks.
Dutch, bgs. ..... lb. .13 - —
Danish, bgs. ..... lb. .12 - —
Polish, bgs. ..... lb. .12½- —
Turkish, bgs. ..... lb. .11 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 • —
dms., l.c.l., same basis 100 lbs. 5.25 • —
tanks, same basis 100 lbs 3.70 • —
reg., flake, 88-92% dms c.l. same basis 100 lbs. 9.55 • —
dms., l.c.l., same basis. 100 lbs.11.05 • —
Potash, caustic, solid, 88-92%, dms., c.l., works 100 lbs. 9.10 • —
dms. l.c.l., works 100 lbs.10.60 • —
Potassium acetate, NF, 200-lb dm., f.o.b. works, E lb. .31 • —
Potassium bicarbonate, USP, gran., dms lb. .22 • —
powd., dms. lb. .24 • —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs. l.c.l., works lb. .18½- 19¾
Potassium bichromate in dms ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb bgs., c.l., frt. equald lb. .37 - —
100-lb bgs. 5,000 lbs. 1 shipt., same basis lb. .38 - —
100-lb bgs. smaller lots, same basis lb. .40 - —
Potassium borohydride, powd dms., works lb.16.00 22.00
Pelletized potassium borohydride $1.25 per lb higher in 1,000-lb lots
Potassium bromate, 200-lb dms., c.l. frt alld lb. .49 - —
Potassium bromide, USP gran., bbls. kgs lb. .39 .40
Potassium carbonate, dom. NF, gran., bbls., dms lb. .22 - .24
Dom. tech. powd., bbls., dms lb 21 22
Dom. calcinated, bgs. c.l. works. 100 lbs. 8.50 —
bgs., l.c.l., same basis 100 lbs 9.55 —
Dom. hydrated, 83-85% bgs. c.l., works 100 lbs 7.10 - —
bgs. l.c.l. works 100 lbs 8.15 - —
Potassium chlorate, cryst, dms, c.l., works lb. 12¼- —
dms., l.c.l., works lb. .12½- .14½
Powd., dms., c.l., works lb 12¾- —
dms. l.c.l., works lb .14 .15
works lb 12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF gran., 25-lb metal dms lb. 36 - —
NF powd., dms., 2,000 lbs or more works lb 17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l. works ton 29.00 - —
bgs., c.l., works ton 32.00 - —
99.3% KCL, bulk, c.l. works ton 28.00 - —
bgs., c.l., works lb.33.00 - —
USP, cryst., dms ..... lb.33.00 • —
USP, gran., dms. ..... lb. .21 - .23
USP, powd., dms. ..... lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate, tech., dms., works lb .50 .51
Potassium citrate, NF gran 250-lb. dms., f.o.b. works E lb. .43 - —
powd. 250-lb dms. same basis, lb. .46 —
Potassium cyanide, dms. 20,000-lb. lots or more, divd. E lb. .42½- —
dms., 5,000-19,999-lb. lots, works lb. .43 —
dms., 2,000-4,999-lb. lots lb. .43½- —
dms., 1,999-lb. lots or less lb. .44½- .46½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots works lb .50 —
dms. smaller lots works lb. 65 —
Potassium ferrocyanide, dms., ton lots lb 24½- —
dms. smaller lots lb 29 - —
Potassium fluoborate, fib dms, c.l., works lb .30 —
fib dms, l.c.l. works lb .31 —
Potassium fluoride, dms, works lb .36 .37
Potassium gluconate, 100-lb dm., f.o.b. works E lb 1.67 —
Potassium guaiacol sulfonate, NF dms lb 2.10 2.30
Potassium hydroxide, tech. (see Potash caustic)
Potassium hydroxide, USP, pellets, 100-lb dms, 1 to 100-dm. lots lb 33½ .38
Potassium hypophosphite, NF fib dms., 1,000 lb lots lb 1.38 —
Potassium iodide, USP, cryst. gran., 250-lb. dm., f.o.b. works lb. 1.55 • —
Potassium manure salt, min 20% K_2O, bulk, c.l. works, unit-ton .17 - .1765
Potassium metabisulfite, gran dms., lb .16 —
Powd., dms lb 27 —
Potassium muriate, standard, bulk, c.l., works unit-ton. .36 - .38
bagged 60% minimum K_2O, same basis ton.26.60 -27.80
Potassium muriate, gran., bulk, c.l., works unit-ton. .39 - .41
bagged, 60% minimum K_2O, same basis ton.28.40 -29.60
Inside prices apply to material contracted for prior to July 1, 1961.
Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.17.00 - —
bbls., smaller lots 100 lbs.18.00 -19.00
gran., bgs., 20-ton lots 100 lbs 9.50 —
bgs., smaller lots 100 lbs.11.00 -12.00
powd., bgs., 20-ton lots 100 lbs.10.50 —
bgs., smaller lots 100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b works E lb. .32 • —
Potassium pentaborate, gran., dms., c.l. works ton.219.50 • —
dms., ton lots, ex whse 100 lbs.17.48 • —
dms., smaller lots, ex whse 100 lbs.18.73 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 .20
Potassium permanganate, comi., kgs. works lb. .25 .33
USP, dms., works lb. .29 .35
Potassium pyrophosphate, tetrabasic, dms., works lb. .1475- 1575
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be. 1.2.0, dms., c.l., works 100 lbs. 6.50 • —
dms., l.c.l., 5 dm. lots or more, works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 • —
40.5° Be 1:2.1, dms., c.l., works. 100 lbs. 5.95 • —
dms, l.c.l. 5 dm. lots or more, works 100 lbs 6.70 • —
tanks, works 100 lbs 5.60 • —
Glass grade, bgs., c.l., works 100 lbs. 17.30 -18.00
bgs., l.c.l., works 100 lbs.17.80 • —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 • —
dms., l.c.l., 5-dm. lots or more, works 100 lbs 5.70 • —
tanks, works 100 lbs 4.60 • —
Potassium silicofluoride, bgs. works. lb .09½- .10
Potassium silicofluoride in drums, 0.4c per lb higher.
Potassium stannate, dms. frt. alld. lb. .866 - .938
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works unit-ton. .70½- .72½
Inside price applies to tonnage contracted for prior to July 1, 1961.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms. lb .31 .33
NF VII, gran., 400-lb. dm lb. .18 - —
NF VII, powd. 400-lb dm lb. .17 - —
Potassium sulfocyanate, NF cryst., (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms. works lb. .96 98
Tech., dms., works lb. 77 79
Potassium titanate, cums. c.l., works. lb. 16¼ —
ctns. 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. 16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk works base price. ton.13.45 - —
bulk, works, July torward ton.14.00 - —
Potassium-sodium tartrate, NF, granular powd. 250-lb dms., c.l. works E lb 42½- —
250-lb dms. 5,000-lb lots, same basis lb. 43 —
250-lb. dms. same basis lb. 43½- —
Potassium-titanium fluoride, fib. dms. works lb. .39 40
Potassium-zirconium flouride, fib. dms. c.l. works lb. .50 —
fib dms., l.c.l. works lb. .52½ 55
Pregnenolone, bots gram No prices.
Pregnenolone acetate, bots gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms. 2,000-lb. lots, frt. alld. lb. 2.10 2.25
Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots frt alld lb 2.40 —
dms. 500 lbs lb 2.45 —
dms. 100 lbs lb 2.50 —
Progesterone, USP bots gram No prices.
Pregnenolone acetate, bots gram No prices.
Propenyl guaethol, dms lb.24.30 27.00
b-Proprinlactone, tech., dms. c.l., f.o.b. works lb. .47½ —
dms., l.c.l., t.l., same basis lb. .48½ —
tanks, same basis lb. .45 —
Propionic acid, syn. pure, dms., c.l., divd lb. 23¼ —
dms., l.c.l., divd. lb. 24¾ —
tanks, divd lb. 20¾ —
n-Propyl acetate, dms., c.l., divd. lb. .14¾ —
dms., l.c.l., divd lb. .16¼ —
tanks, divd lb. .12¼ —
n-Propyl alcohol, dms., c.l., divd lb. .14 .15
dms., l.c.l., divd lb. .15½ 16½
tanks, divd lb. 11½ 12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb 3.90 4.40
n-Propyl-p-hydroxybenzoate, USP, dms lb. 2.30 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., divd lb 1.24 —
dms. l.c.l. same basis lb 1.255 —
n-Propylene dichloride, consumers', dms. c.l. divd E lb. .0845- —
dms., l.c.l. same basis lb. .0995- —
tanks same basis lb .07 —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., divd. E lb. .15 —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms. c.l., divd. E lb. .17 —
dms. l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .14½- —
Propylene glycol methyl ether, dms., c.l., divd lb. .20 —
dms., l.c.l., same basis lb. .21 —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., divd E, lb. .17 —
dms. l.c.l., divd. E lb. .18½- —
tanks, divd E lb. 14½- —
Psyllium seed, black, bgs lb. .42 .45
Blonde, bgs lb. .18 .20
Husks, bgs. lb. .45 .48
Pumice, dom., grd., coarse to fine, 0, ½ 1, 1½ 2, 3, bgs., ton lots lb. .03¾ .04¼
bgs., smaller lots lb. .03¾- —
Pumice, imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs. ton lots lb. 04 —
sun dried, coarse, bgs ton.60.00 —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs. ..... lb. .25 • .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .50 • —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 • —
Pyrethrum liquid, 20-1 basis (2 grams pyrethrins per 100cc odorless base) dms. works, gal. 9.60 9.80
100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 -11.35
purif, 20%, dms. works lb.11.00 -11.35
Pyridine, denat. dms. c.l. works and frt. equald gal. 2.77 • —
dms., l.c.l., same basis gal. 2.80 • —
Reid., 2° non-ret dms., c.l., same basis lb. .75½- —
dms., l.c.l., same basis ..... lb. .76 • .76½
tanks, same basis ..... lb. .71 - —
Potassium persulfate, dms., c.l., works lb. .17½- —
dms. l.c.l., works lb. .18 .21
Pyridoxine hydrochloride, USP, dms., f.o.b. works kilo.90.00 • —
Pyrites, Canadian 48-50% S, mines, long-ton. 4.50 5.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid tech. bbls., 100-lbs., f.o.b., works lb. 3.50 • —
Pyrogallol, NF 100-lb. dms ..... lb. 3.50 • —
Pyroxylin, USP, bots ..... lb. 9.50 • —

Q

Quassia chips lb. .10 • —
Quicksilver (see Mercury metal)
Quince seed, bgs ..... lb. 1.55 • 1.75
Quinidine sulfate, USP, 1,000-oz. dm oz. .78½- —
Quinine, NF, 1,000-oz. dm. oz. .3750- —
Quinine bisulfate, USP 1,000-oz. dm. oz. .28 - —
Quinine hydrochloride, 1,000-oz. dm. oz. .3650- —
Quinine sulfate, USP 1,000-oz dm. oz. .3150- —
Quinoline, dms. c.l. frt. equald lb. .50¾- —
dms., l.c.l., same basis ..... lb. .51¼- —
tanks, same basis ..... lb. .50 —

R

R salt paste, dms., c.l., t.l., frt. alld., 100% basis lb. .98 - —
Powd., dms., c.l., t.l., frt. alld, 100% basis lb. 1.08 • —
Rapeseed oil, dms. ..... lb. .18 - .18¼
tanks ..... lb. .16 - —
Rare earth oxalate, NF, 45-50%, bgs. works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls. dms lb. 1.00 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

Red precipitate (see Mercuric oxide red)
Red toner, Lake C, alizanine, bbls., works lb. 1.30 • —
Reserpine, cryst. bots gram 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt. equald lb. 77½- —
bgs., l.c.l., same basis ..... lb. .78½- —
Resorcinol in dms. 1c. per lb more.
Resorcinol monoacetate, NF dms. lb. 2.50 - —
USP, powd., dms., works lb 2.95 - —
Rhatany root, bgs lb .14 .16
Rhodamine red toner, molybdated, PMA, kgs. works lb 6.00 —
Tungstated PTMA works, kgs lb 6.60 —
Rhodinol, 5-lb cans lb.42.00 -51.00
Synthetic lb.14.00 -16.00
Rhubarb root, India, whole, bgs lb .25 —
powd. bgs lb .35 —
Riboflavin, USP, fib dms., kilo or more, divd kilo.36.00 - —
Riboflavin-5-phosphate-sodium, fib. dms. kilo or more, divd. kilo.104.70 - —
Rice bran oil, clarified, dms. l.c.l. lb. .15½- —
tanks, divd, E lb. .14 - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium sodium tartrate)
Roofing pitch (see Coaltar pitch, roofing).
Rose oil, nat., Bulgarian, bots lb.1,152.00 —
Turkish, bots., otto lb.600.00 -700.00
absolute lb.145.00 - —
Rosemary oil, Spanish, NF, cns., dms lb. 1.15 - 1.20
Spanish, tech., cns., dms lb. .80 - .95
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .10½- —
Resin, 25-45% fib dms. works, unit-lb. .10½- —
Rottenstone, bgs. 5-ton lots, ex-whse lb. .03¾- —
bgs. ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —
Rue oil, bots lb. 2.75 3.00
Rutin, NF fib dms. 10 kilo lots, kilo.11.00 - —
fib. dms., 5 kilo lots kilo.11.50 - —
fib. dms., 1 kilo kilo.13.00 - —
Ryania, 100% powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l. same basis lb. .24 - —

S

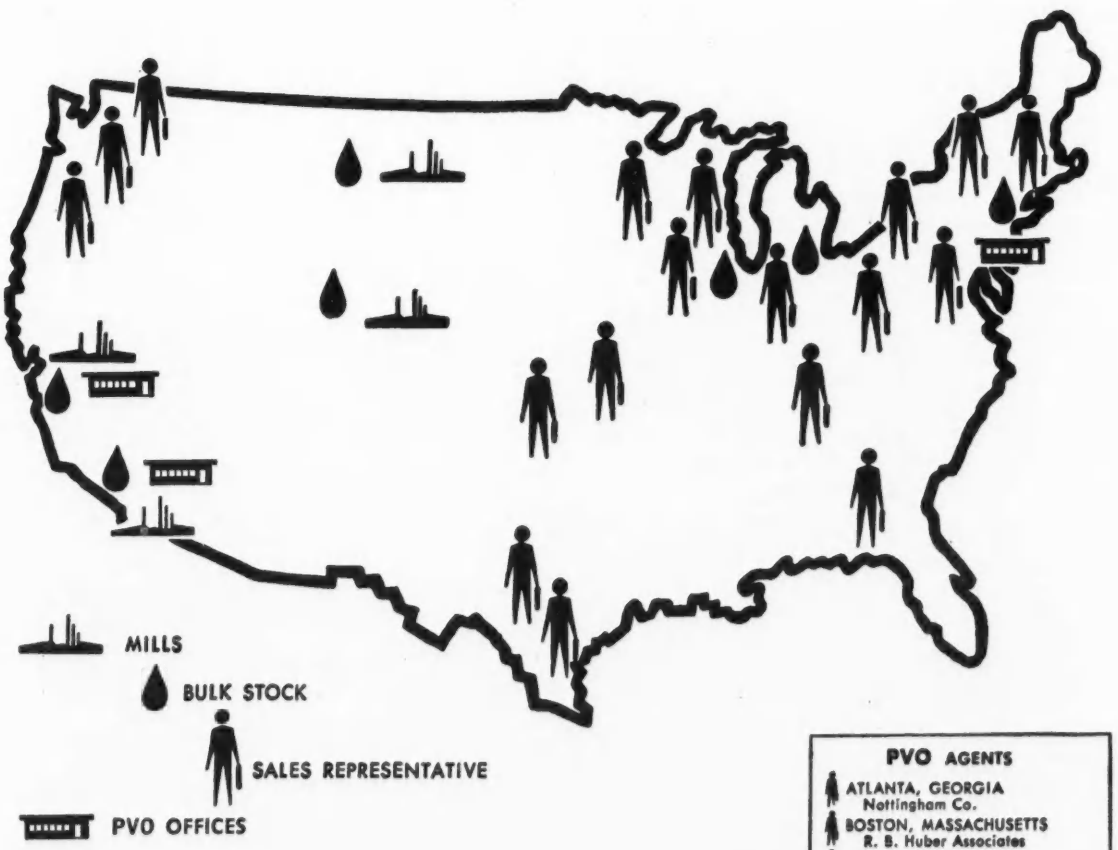
S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 .44
Saccharin, calcium, fib dms. 1,000-lb lots, works lb 2.50 —
Saccharin, USP, gran., soluble, dms., 1,000-lb. lots lb. 1.50 —
dms., smaller lots lb. 1.60 • —
USP, powd., soluble dms., 1,000-lb. lots lb. 1.55 • —
dms., smaller lots lb. 1.65 • —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.53 • —
dms., smaller lots lb. 1.63 • —
Safflower oil, dms., New York lb. .19 - 20
tanks, Atl. coast lb. 17½- —
Saffron, Mancha Superior, tins lb.19.50 - —
Safrol, dms lb .65 - —
Sage, Dalmatian, bgs lb .40 - —
Greek, cns lb .15 - —
Italian, cns lb .18 - —
Sage oil, clary, bots. lb.11.00 -12.00
Dalmatian, cns lb 2.85 3.25
Spanish, cns lb 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms. c.l., t.l., f.o.b., plant, frt. equald lb 1.23 • —
dms., l.c.l. same basis lb. 1.25 • —
Salicylamide, 100-lb dms lb. 1.05 • —
Salicylic acid, tech., fib. dms., c.l., t.l., divd lb. .40½- —
fib dms. l.c.l., divd lb. .44¾- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .51¾- —
200-lb. fib. dms., less than 1,000 lbs lb. .54¾- —
100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .56¾- —
USP, pwd., 100-lb. fib. dms., 1,000 lbs. or more lb. .58¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .61¾- —
Salol, NF, gran., bbls., kgs lb. 1.20 • —
Powdered salol, 25c per lb higher.
Salt, rock, paper bgs., c.l. 100 lbs 1.09 • —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 • —
Saltcake, dom. bulk, works, 100% Na_2SO_4 basis ton.28.00 • —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs., lb. .55 - .66
powd. fib. dms lb. 75 - .76
Sandalwood oil, cns. ..... lb.27.00 -30.00
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 —
lb. No stocks.
Sassafras oil, artif., dms ..... lb. .45 - —
Nat., dom., dms ..... lb. 1.40 • —
Savory oil, cns lb. 4.75 • —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 • —
Powd. bgs. frt alld. 100% basis. lb. .95 • —
Scopolamine hydrobromide, USP, 10 oz. lots, bots oz.13.50 • —
Sebacic acid, CP, bgs., c.l., works. lb. .69½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs. c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib dms., 5,000-lb. lots lb. .30½- —
fib dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., divd. lb. 6.50 • —
Senega root, bls lb. 2.40 • —
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Senna leaves, Tinneveley, No. 1, bls lb. .26 - .30
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls lb. .28 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 7.00 - 7.50
Sesame oil, USP, dms., l.c.l lb. .37 - .38
Sesame seed, Colombian, bgs lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .21 - —
nat., bgs. lb. .15 - —
Salvadorian, Nat. bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .47 - —
dms., l.c.l. works lb. .22 - .20½
bbls., 1,500-lb. lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c. per lb. higher for all packages.
Shellac, bleached, refd. bgs., 1,500-lb. lots lb. .56 —
bbls., 1,500-lb lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 .39
lemon No. 2, bgs. 10-bg. lots, lb. .34 .37
superfine, bgs. 10-bg lots lb. .32 .34
Shellac in 1 to 10-bg lots 1c. per lb more.
Shingle stain, oil tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs. l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton.25.00 —
bgs. l.c.l. works, ex whse. ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l. works ton.20.00 - —
bgs., l.c.l., works ton.25.00 - —
99½% 140 mesh bgs., c.l., works ton.15.00 - —
bgs. l.c.l. works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, cs. Troy oz. .91⅜- —
Silver cyanide, bots. 1,000-oz. lots, oz. .94¾- —
bots. 500-oz. lots oz. .95¼- —
bots. 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots. 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz higher
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 —
Snakeroot, oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls. ..... lb. .40 - —
Powd., bls. ..... lb. .50 - —
Whole, bls. ..... lb. .30 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 4.77
bulk c.l., works 100 lbs 1.60 —
Light, 58%, paper bgs., c.l., works 100 lbs 1.85 —
paper bgs. l.c.l., stock pts. bulk, c.l., works 100 lbs. 1.55 - —
100 lbs. 3.95 4.72
Soda, caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs. 5.20 —
liq. 50% sellers tanks works, dry basis 100 lbs. 2.90 —
50% rayon type, sellers' tanks works, dry basis 100 lbs. 2.90 3.00
Liq. 73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
liq. 73% rayon type, sellers' tanks, works, dry basis lb. 3.00 3.10
solid 76% dms. c.l., works, 100 lbs 4.80 - —
Soda sal, conc. bgs. c.l. works 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., divd. E lb. .14½- —
bgs., l.c.l., same basis lb. .16½- —
NF 60% gran. dms. c.l., works, lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom. 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs. c.l. divd, E lb. .27½- —
bgs., l.c.l., divd. E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm less than ton lots, f.o.b. works lb. .24 —
ton lots or more, same basis. lb. .23½- —

Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 5.60 - —
less than 100-kilos kilo. 5.85 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, 100-lb. dms., ton lots, same basis lb. .43 - —
100-lb. dms., 1,000-lb. lots, same basis lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 — —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., ngs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bichromate in dms. ¾c. per lb higher
Sodium bifluoride, fib. dms., c.l., works, frt. equald lb. .19½- —
fib. dms., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l. works, 100 lbs. 2.00 — —
dms., c.l., frt. equald 100 lbs. 3.00 — 3.60
dms., l.c.l., frt equald 100 lbs 3.50 — 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs 5.00 - —
bgs., l.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs 1.70 - —
bbls., l.c.l works 100 lbs 2.20 - —
Sodium borate (see Borax)
Sodium borohydride powd., dms., c.l., works lb. 8.00 - —
dms., l.c.l., works lb. 11.75 - 14.00
stabilized water soln., 12% NaBH, 100% basis, tanks, works lb. 7.50 - —
dms., same basis lb. 11.50 - 13.00
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide USP gran, dms., works lb. .40 - —
Sodium carbonate, cryst. monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., l.c.l. works 100 lbs 3.50 - —
bgs., c.l., works 100 lbs 3.10 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb dms., c.l., works lb. .09 — —
dms., l.c.l., works lb. .09½- .10¼
Sodium chlorate in 100-lb. dms., only, ¼c. per lb higher
Sodium chloride, tech. (see Salt).
Sodium chloride, USP gran. bgs. lb. .05 - —
Sodium chlorite, tech. dms., c.l., works lb. .58 - —
dms. 20-dm lots or more works. lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech. dms., c.l., works lb. .27 — —
dms., l.c.l., works lb. .28 — —
Sodium chromate, anhyd. fib. dms., c.l., t.l., works lb. .14¾ — —
fib. dms l.c.l. works lb. .15¼- .16½
Tetrahydrate, bgs., c.l., t.l., works. lb. .1015- —
bgs. l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., 200-lb dm., f.o.b. works E lb. .62 - —
NF VIII gran bgs. c.l., same basis lb. .26 - —
USP XIV gran. bgs., c.l., same basis lb. .29 — —
Sodium citrate, USP powd prices ½c higher.
Sodium cyanate, dms. 1,000-lb lots, works lb. .85 — —
dms., smaller lots, works lb. .90 — 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., divd., E. of Rockies, 20,000-lb lots lb. .183 - —
dms., same basis, 5,000 to 19,999-lb. lots lb. .203 - —
dms., same basis, 2,000 to 4,900-lb. lots lb. .208 - —
dms., same basis, 1,999-lb. lots and under lb. .218 - —
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 — —
250-lb dms., c.l., works lb. .18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 — —
250-lb dms., l.c.l. works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l. frt. alld., 100% basis lb .42 — —
dms., l.c.l., t.l., same basis lb. .47 — .52
tanks, same basis lb .38 — —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots lb. .14¾- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l. works. 100 lbs. 7.05 - —
bgs. l.c.l. ex whse 100 lbs. 8.65 - —
Sodium gentisate, 100-lb fib dms.lb 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b works E lb. .44 - —
Tech, bgs. c.l. t.l., same basis lb. .34 - —
Sodium hydride, 50% soln in oil, dms., works lb. 1.25 — 2.50
25% soln in oil, dms., 50 lbs. or less, f.o.b shipping point. lb. 2.20 - —
dms., 50-99 lbs. same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb 1.20 — —
Sodium hydride, dms., 1,000 lbs. or more, same basis lb. .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms., c.l., frt. alld lb. .23½ — —
dms. l.c.l. frt alld. lb. .25¾- —
Sodium hydroxide, NF, pellets, 100-lb dms., 1 to 100-dm lots. lb. .23½ — .26
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite, NF, dms. 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb dms., f.o.b. works lb. 2.13 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., t.t.l., dlvd. lb. .21½- —
tanks, dlvd. lb .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - —
l.c.l., bgs., works 100 lbs. 4.75 - 5.25
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate, octahydrate, gran. bgs., c.l. works ton 210.00 — —
bgs., ton lots, ex whse 100 lbs 8.30 - —
bags, smaller lots, ex whse, 100 lbs. 9.61 - 11.61
Tetrahydrate bgs. c.l. works ton 210.00 — —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs., smaller lots, ex whse 100 lbs. 16.08 - 18.08

Sodium, metallic, bricks, c.l., works. lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb. .53 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate, pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., l.c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. 1.02 - 1.21
Cryst., dms., works, frt. alld lb. .84 - .86
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate, monohydrated)
Sodium naphthionate, bbls. lb. .77 - —
Sodium nitrate, dom., crude, bgs., c.l., works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse. ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.40 - —
bbls., l.c.l., same basis 100 lbs. 11.40 - —

Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works. 100 lbs. 12.35 - —
99%, bgs., works 100 lbs. 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate)
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .137 - —
bgs., l.c.l., works lb. .152 - .215
Sodium peroxide, dms., c.l., t.l., divd E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56

Sodium phosphate, dibasic, anhyd., bgs., c.l. frt equald 100 lbs 8.10 — —
bgs., l.c.l. same basis 100 lbs 8.50 — 9.55
Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt. equald. 100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs 5.15 — 5.90
Duohydrate, bgs., c.l., frt. equald. 100 lbs. 7.75 - —
bgs., l.c.l., same basis 100 lbs. 8.25 — —
Monobasic, anhyd bgs., c.l., frt. equald 100 lbs 9.15 — —
bgs., l.c.l., same basis 100 lbs. 9.55 - 10.15
Tribasic, anhyd. bgs. c.l., frt. equald 100 lbs. 9.15 — —
bgs., l.c.l. frt equald 100 lbs. 9.60 - 10.20
Sodium phosphate in dms. 60c. to 80c. higher than bgs
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 .20½
Sodium picramate, tech., paste, dms. f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms. dlvd E of Rockies. lb. .34½- —
Prices W of Rockies 3c. per lb more
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l., works, frt equald 100 lbs. 11.25 — —
bgs., l.c.l., same basis 100 lbs. 12.00 - 12.50



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Sodium Pyrophosphate—Styrax Gum

Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l. works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.38 - —
bgs., l.c.l., same basis 100 lbs. 8.13 - —
bulk, hopper cars, same basis, 100 lbs. 6.83 - —
Sodium salicylate USP dms., 1,000-lbs or more lb. 78½- —
dms. less than 1,000 lbs. dms lb. 81½- —
Sodium sesquicarbonate ngs., c.l., works 100 lbs. 2.35 —
l.c.l., divd. zone 1 100 lbs. 4.10 - 4.35
divd zone 2 100 lbs. 4.35 4.60
divd. zone 3 100 lbs 4.75 4.90
divd zone 4 100 lbs 5.35 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La. and Miss. south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 99° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l. works 100 lbs. 5.70 - —
dms. c.l., t.l., works 100 lbs 6.20 - —

Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms. 6,000-19,900 lb. lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid dms., c.l., works, 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be. 1:2.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725- —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld. E lb. .731 - .887
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton.56.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton.38.00 - —
bulk, c.l., works ton.34.00 - —
USP, cryst., fib dms. lb. .17½- .18

Sodium sulfhydrate, flake, 70-73%, dms., c.l., works, frt. equald lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l. same basis 100 lbs. 7.95 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l. same basis lb. .05½- —
Sodium thiocyanate, purified, cryst., 250-lb dms lb. .90 - —
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate, NF, cryst. bbls. lb. .13½- —
Tech., anhyd. 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs. l.c.l., l.t.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, photograde, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb. bgs., l.c.l. l.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 5.20 - —

Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E. lb. .35½- —
10-lb. cns., c.l., frt. alld. E. lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.73 - —
bgs., l.c.l., same basis 100 lbs. 8.48 - —
bulk, hopper cars, same basis, 100 lbs. 7.18 - —
Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., dlvd lb. .22½- —
dms., l.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Petroleum, straight, aromatic, 310°-360F. b.r., 14°-16° C. m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355° 420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York, gal. .30 - —
Houston, Texas gal. .30 - —
Partial aromatic, 211°-265°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380°F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb. lots, works lb. .33½- —
10,000 to 20,000-lb. lots, works, lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, USP, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16¼- —
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comi., aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27 - —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., l.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton.56.50 - —
Soybean oil, crude, tanks, Decatur, lb. .10⅝- —
Foots, soapstock acid 95%, tanks, New York lb. .05¾- —
Alkali, refd., dms. lb. .1493- .1518
tanks lb. .1293- —
Clarified dms. lb. .1443- .1468
tanks lb. .1243- —
Refd., salad, dms. lb. .147⅛- .151⅛
tanks lb. .123⅛- —
Soybean oil acids, dbl. dist., dms., lb. .17¼- .18⅛
tanks lb. .14¾- —
S. D., dms. lb. .16 - .18⅛
tanks lb. .13½- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls lb. .75 - —
Spearmint oil, NF, dms lb. 3.75 - —
Sperm oil, bleached winter, 45°, dms., lb. .1750- .1850
tanks lb. .1550- —
Nat., winter, 45°, dms. lb. .1650- .1750
tanks lb. .1450- —
Spermaceti wax, blocks, cs. lb. .32 - .33
cakes, cs. lb. .33 .34
Spruce oil, cns., dms. lb. 2.10 - 3.55
Squill, white, bls. lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - .20
Stannic chloride, anhyd., dms., works lb. .902 - .924
Stannous chloride, anhyd., dms lb. 1.123 - 1.478
Stannous chloride, hyd., crystal, 800 lbs. or more lb. .85½- —
Stannous oxide, dms., dlvd. lb. 1.673 - 1.803
Stannous sulfate, works lb. 1.211 - 1.251
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, bbl. pressed, bgs. lb. .16¾- .19¼
Single-pressed, bgs. lb. .16¼- .18¾
Triple-pressed, bgs. lb. .18½- .21
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .15 - .20
Streptomycin sulfate, bulk gram. .028 - .03
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works, 100 lbs 11.00 - —
bgs., l.c.l., works 100 lbs.12.00 - —
Strontium salicylate, NF, dms lb. 1.80 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works, ton.56.70 -66.15
Strophanthin G (see Quabain, USP)
Strophanthin K bots. oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 2.50 - 3.00
Styrax gum, USP, cs. lb. 4.50 - 5.50

Product selection simplified!

Anhydrous Sodium Metasilicate	Anhydrous Sodium Orthosilicate	Anhydrous Sodium Sesquisilicate	Pentahydrate Sodium Metasilicate
DRYMET®	**DRYORTH®**	**DRYSEQ®**	**CRYSTAMET®**
Most highly concentrated metasilicate . . . a source of controlled alkalinity. DRYMET puts extra value into your cleaning compounds. Blends easily with other alkalies, soaps, synthetics.	Ready-to-use, power-packed, highest pH detergent silicate. DRYORTH is an excellent heavy duty metal cleaner and laundry detergent. Other important applications.	A medium pH alkaline salt for fast, dependable work at low cost to the user. DRYSEQ has excellent penetrating and wetting-out properties.	Exceptionally pure hydrated metasilicate. Stable crystal structure and uniform spherical granules make CRYSTAMET ideal for compounding free-flowing mixtures. Available in three screen ranges.

Use Cowles Detergent Silicates to Fit Your Specific Application

Cowles CHEMICAL COMPANY
CLEVELAND 20, OHIO

Stocked in principal cities and available in mixed carloads and truckloads, Cowles detergent silicates give you complete versatility in compounding. Send letterhead request today for more information.

Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd.	lb.	.17	—
dms., t.c.l., same basis	lb.	.19	—
tanks, frt. equald.	lb.	.132	—
Tech., 99.2%, dms., c.l., dlvd.	lb.	.15	—
dms., t.c.l., same basis	lb.	.17	—
tanks, frt. equald	lb.	.1103-	—
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.			
Styrolyl acetate, bots	lb.	1.03	1.10
Succinic acid purif., cryst., dms., t.l., frt. alld	lb.	.62	—
dms., t.t.l., same basis	lb.	.63	.75
Succinic anhydride dms., c.l., t.l., dlvd	lb.	.51	—
dms., t.c.l., same basis	lb.	.52	—
Sucrose, refd. white bgs. refy E.	lb.	.0915-	—
Sucrose acetate, isobutyrate, 90%, dms. t.l., dlvd	lb.	.33½-	—
dms., t.t.l., same basis	lb.	.35	—
tanks, same basis	lb.	.31	—
100%, t.l., dms., dlvd.	lb.	.35½-	—
t.t.l., dms., same basis	lb.	.37	—
Sucrose octa-acetate, denaturing grade 100-200-lb. lots, bgs. t.c.l. works	lb.	1.00	—
Sugar (see Sucrose)			
Sugar cane wax dom., refd., slabs, 80-lb ctns., works	lb.	.60	.65
80-lb ctns., spot	lb.	.65	.75
Sulfabenzamide dms	kilo	8.80	9.90
Sulfabenzamide-sodium, dms.	kilo	9.00	-10.10
Sulfacetamide USP fib dms	kilo.	6.61	6.83
Sulfacetamide-sodium USP, fib. dms	kilo	8.15	9.25
Sulfadiazine USP, microcrystals, dms	kilo	23.35	-24.45
USP, powd. dms	kilo.	22.60	-23.70
Sulfadiazine-sodium, USP dms	kilo.	24.80	-25.90
Sulfaguanidine NF X dms	kilo	5.50	6.60
Sulfamerazine, USP, microcrystals, dms	kilo.	23.50	—
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	25.90
Sulfamethazine USP XV, microcrystals, dms	kilo.	19.65	-20.75
USP XV powd., dms	kilo.	18.75	-19.85
Sulfamic acid cryst. dms., c.l., t.l., works	100 lbs.	16.00	—
dms., t.c.l., t.t.l., works	100 lbs.	17.50	18.50
Gran., dms., c.l., t.l., works	100 lbs.	14.75	—
dms., t.c.l. t.t.l. works	100 lbs.	16.25	-17.25
Sulfanilamide NF reg. 1,000 lb., fib. dms., frt. equald	lb.	1.75	—
NF, reg., smaller lots, fib. dms., frt. equald	lb.	1.80	—
Sulfanilamide quinoxaline, veterinary dms	kilo.	16.28	—
Sulfanilic acid, tech. dms. c.l., frt. alld	lb.	.21	—
dms., t.c.l. frt alld	lb.	.23	—
Sulfapyridine, USP XV, powd., bots., tins	kilo.	15.45	-16.55
Sulfapyridine-sodium, monohydrate, dms	kilo.	16.53	-17.65
Sulfathiazole NF X, microcrystals, dms	kilo.	6.25	6.90
NF X, powd. dms.	kilo.	5.50	6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb lots or more	lb.	2.35	—
Sulfur, comi flour, bgs., mines, 100 lbs.	100 lbs.	2.35	—
bbls., mines	100 lbs.	3.30	—
lump, bgs., mines	100 lbs.	2.25	—
bbls., mines	100 lbs.	2.80	—
Sulfur crude, dom. bright, bulk, f.o.b cars, mines	long-ton.	23.50	—
export, f.o.b vessels, Gulf ports.	long-ton.	25.00	—
US and Canada, f.o.b. vessels Gulf ports	long-ton	25.00	—
Domestic dark sulfur prices are $1 per long-ton lower			
Sulfur, crude, imp. Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos	long-ton	24.00	—
Mexican dark sulfur price is $1 per long-ton lower			
Sulfur, refd., flowers, NF, bgs., mines	100 lbs.	5.65	—
bbls., mines	100 lbs.	7.00	—
flour, light, bgs., mines	100 lbs.	5.25	—
bbls., mines	100 lbs.	6.25	—
lump, bgs., mines	100 lbs.	4.95	—
rolls, bgs., mines	100 lbs.	5.50	—
bbls., mines	100 lbs.	6.25	—
salf block, bgs., mines	100 lbs.	4.65	—
virgin block, bbls., mines	100 lbs.	4.70	—
Sulfur, rubbermakers, comi., reg., bgs., mines	100 lbs.	2.45	—
bbls mines	100 lbs.	3.70	—
98-100%, pashing through mesh, bgs., mines	100 lbs.	2.55	—
bbls., mines	100 lbs.	3.80	—
Sulfur, refd., bgs., mines	100 lbs.	4.90	—
bbls., mines	100 lbs.	6.05	—
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.75	—
bbls. mines	100 lbs.	4.00	—
Sulfur dichloride, ret. dms., c.l., works, frt. equald	lb.	.05½-	—
ret. dms., t.c.l., same basis	lb.	.06¾-	—
tanks, same basis	lb.	.04½-	—
Sulfur dioxide, liq., comi., cyls., works, frt. equald	lb.	.10	.13
multi-unit cars, works	lb.	.0535-	—
tanks works	lb.	.045	—
refrigeration, cyls., dlvd	lb.	.33	—
Sulfur monochloride 55-gal. non-ret. dms., c.l., frt. equald	lb.	.05½-	—
dms., t.c.l., same basis	lb.	.06¾-	—
tanks, same basis	lb.	.04½-	—
Sulfuric acid 60° Be, cbys., c.l., works	100 lbs.	2.00	—
cbys., t.c.l., works	100 lbs	2.30	—
tanks, works	ton.	18.60	—
66°Be, cbys., c.l., works	100 lbs.	2.25	—
cbys., t.c.l., works	100 lbs	2.55	- 3.35
tanks, works	ton	22.35	—
98%, tanks, works, East	ton.	23.50	—
99%, tanks, works, East	ton.	23.70	—
100%, tanks, works, East	ton.	23.95	—
Sulfuric acid, California works, tanks	ton.	26.45	—
CP NF consumers cbys., c.l., frt. equald	lb.	.12¾-	—
Sulfuric acid, CP, NF, consumers' cbys., t.c.l., same basis	lb.	.14¼-	.14¾
5-pt. bots extra cs., c.l., works, frt. al'd	lb.	.16¼-	—
5-pt. bots, extra cs., t.c.l., same basis	lb.	.17¾-	.18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works	ton.	25.00	—
40%, tanks, works	ton.	29.00	—
65% tanks works	ton.	39.50	—
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore	unit-ton.	.90	.93
bulk, c.l., Carteret, N. J.	unit-ton.	.90	.93
Superphosphate, triple, 45% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla.,	unit-ton.	1.00	—
bulk f.o.b vessel at Fla	unit-ton.	1.05	—
Sweet birch oil, USP, northern, cns	lb.	4.00	9.50
USP, southern, cns	lb.	2.00	3.05

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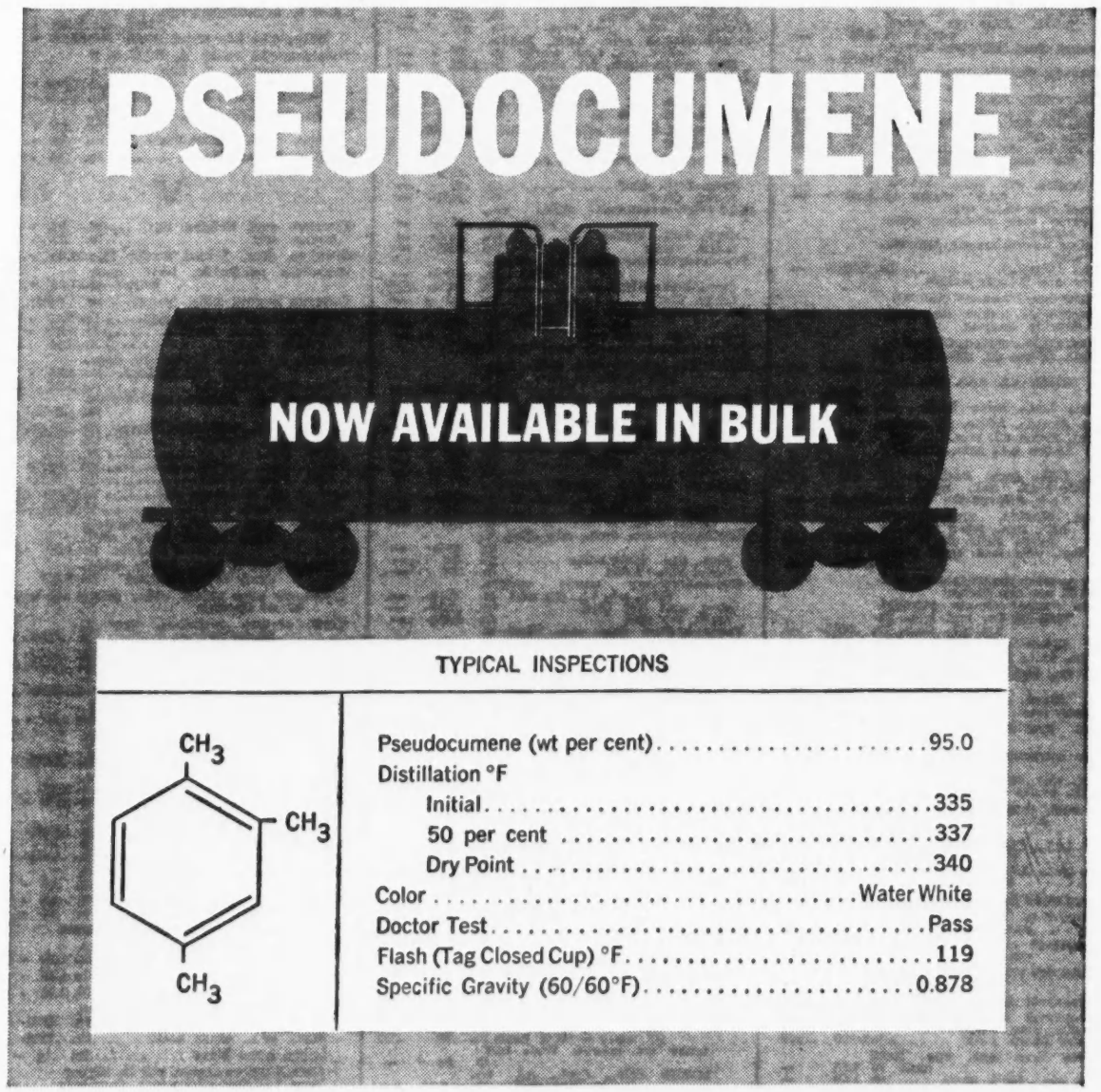
2,4,5-T, dms., c.l., works, frt. equald.	lb.	1.18	—
dms., t.c.l., same basis	lb.	1.25	—
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald	lb.	1.24	—
dms., t.c.l., works	lb.	1.29	—
Talc, dom., fibrous, grd., bgs., c.l., works, New York	ton.	28.00	—
bgs., t.c.l., works	ton.	31.00	-36.00
Talc, dom., 99.5%, 325 mesh, bgs., c.l., works, New York	ton.	31.00	—
bgs., t.c.l., works	ton.	34.00	—
99.95X, 400 mesh, micronized, bgs., c.l. works	ton.	38.00	—
625 mesh micronized, bgs., c.l works	ton	80.00	—
Dom., ord., Calif., grd., bgs., c.l., works	ton.	34.00	-39.50
Vermont, off-color grd., bgs., c.l., works	ton.	19.40	—
bgs., t.c.l., works	ton.	37.00	—
Imp., Canadian, grd., bgs., c.l., mines	ton	20.00	-35.00
tanks, works	lb.	.02⅝-	.03⅛
Tall oil, crude, tanks, works	lb.	.03⅛-	.03½
Acid, refined dms., c.l., works	lb.	.08¾-	.10
tanks, works	lb.	.07½-	.08¾
Dist., depending on grade, dms., c.l., works	lb.	.07¼-	.09¾
tanks, works	lb.	.06 -	.08½
Tall oil fatty acids, less 2% rosin acid, dms., c.l., works	lb.	.09¾-	.11
tanks, works	lb.	.07¾-	.09
2-6% rosin acid, dms., c.l., works.	lb.	.08½-	.09
tanks, works	lb.	.06½-	.07
Tallow, edible, tanks, dlvd	lb.	.08¾-	—
Inedible, fancy, bleachable, tanks,	lb.	.05¾-	—
fancy, guarant'd, bulk, f.o.b., steamer	lb.	.06½	Nom.
dms., f.a.s.	lb.	.07½-	.07⅝
tanks, dlvd.	lb.	.06⅛-	—
No. 1, dlvd	lb.	.05¼-	—
Prime, tanks, dlvd	lb.	.05⅛-	—
Special tanks, dlvd	lb.	.05⅛-	—
Sulfonated, 25%, bbls., t.c.l.	lb.	.08½-	.08¾
50%, bbls., t.c.l.	lb.	.10½-	.11
Tallow acids, dist., dms.	lb.	.13¼-	.15¼
tanks	lb.	.10¾-	—
Hydrogenated, dms.	lb.	.15½-	.18
Tallow oil, acidless, dms., c.l.	lb.	.14	—
dms., t.c.l.	lb.	.16	—
tanks	lb.	.12½-	—
Tangerine oil, Florida, dms	lb.	4.25	—
Tankage, animal, feeding, 9-11% ammonia, New York bulk,	unit-ton.	4.75	5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb lots	lb	2.05	—
bbls., smaller tots	lb	2.06	2.07
powd., bbls., 1,000-lb. lots	lb.	1.95	—
bbls., smaller lots	lb	1.96	1.99
Tech., dms	lb	1.05	—
Tansy oil, dms	lb	6.60	8.00
Tar acid oil, 15-18%, dms., c.l., dms., t.c.l., same basis	gal.	.55½-	—
tanks, same basis	gal.	.43½-	—
25-28%, dms., c.l., frt. equald basis	gal.	.53½-	—
dms., t.c.l., same basis	gal.	.60	—
tanks, same basis	gal.	.50	—
30-33%, dms. c.l., same basis	gal.	.75	—
dms., t.c.l., same basis	gal.	.77	—
tanks, same basis	gal.	.65	—
Tar, coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate).			
Tartaric acid NF 100-lb bgs., c.l., frt. equald	lb.	.41	—
bgs., 10,000 lbs. 1 shipt., same basis	lb.	.43	—
bgs., smaller lots, same basis	lb.	.47	—
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms	lb.	.70	—
Terpineol, extra, dms	lb.	.50	.60
Prime, dms	lb.	.40	.50
Terpinyl acetate, extra cns., dms.	lb	.64	.75
Prime dms	lb	.53	.56
Terpinyl propionate dms	lb	1.65	1.70
Testosterone USP bots	gram	No prices.	
Testosterone propionate, USP bots	gram	No prices.	
Tetrachloroethane dms. works	lb	14½	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate)			
Tetrachloroethylene, tech. (see Perchloroethylene)			
Tetrachloroethylene, USP, 55 gal. dms., c.l., t.l., works	lb.	.20½	—
dms., t.c.l., works	lb	22	.23½
Tetraethyl orthosilicate dms., c.l., dlvd. E	lb.	.65	—
dms., t.c.l., dlvd. E	lb.	.66½-	—
Tetraethyl pyrophosphate, 40%, cns., dms., frt equald	lb.	.75	—
Tetraethylenepentamine dms., c.l., dlvd E	lb.	.53½-	—
dms., t.c.l., dlvd E	lb.	.55	—
tanks, dlvd E	lb.	.51	—
Tetraethylthiuram disulfide, tech., dms., frt alld	lb.	1.04	—
Tetrahydrofuran, dms. c.l., t.l., works	lb	.36¼	—
dms., t.c.l., or t.t.l., works	lb.	.37	—
tanks, works	lb.	.35	—

What's News in Enjay Chemicals...



TYPICAL INSPECTIONS

Pseudocumene (wt per cent)	95.0
Distillation °F	
Initial	335
50 per cent	337
Dry Point	340
Color	Water White
Doctor Test	Pass
Flash (Tag Closed Cup) °F	119
Specific Gravity (60/60°F)	0.878

FIRST from Enjay in commercial quantities . . . pseudocumene (1,2,4, trimethylbenzene) is now available for immediate delivery. Enjay pseudocumene is a low-cost, highly reactive, aromatic hydrocarbon which can be readily converted to intermediates for production of surface coatings, plasticizers, drugs, dyes and many other products.

Pseudocumene will be used commercially in large quantities to produce trimellitic anhydride for use in the manufacture of surface coatings and plasticizers. A blend of pseudocumene and bromobenzene has been found to possess a very high viscosity index, making it a possible useful hydraulic medium in control apparatus designed to operate over wide temperature ranges.

COMPLETE INFORMATION – For a new Pseudocumene Brochure #D-16, write to Enjay, Room 1131, 15 West 51st Street, New York 19, New York.

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY

Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .25½- —
dms., l.c.l., Memphis, Tenn. lb. .26½- —
dms., c.l., t.l., Newark, N.J. lb. .27½- —
Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. .28½- —
tanks, dlvd. E. of Denver lb. .25 - —
tanks, dlvd. W. of Denver lb. .26 - —
Tetrahydrophthalic anhydride dms., c.l. t.l. frt. alld. E lb. .39 - —
l.c.l., t.l.l. same basis lb. 41 - —
Tetrapotassium pnosphate (see potassium phosphate).
Thallium metal, dlvd. lb. 7.50 -10.00
Thallium sulfate, 99%, bots., dlvd. lb 5.00 -10.00
Theobromine, NF, 6b dms., 100-lbs. f.o.b., works lb. 4.10 4.15
Theobromine and sodium acetate, USP, 6b dms., 500-lbs. works lb 6.45 - —
Theobromine, sodio-salicylate, NF, 6b dms., 500-lbs., works. lb. 3.80 - —
Theophyline, USP, anhyd., 100-lb. dms., frt alld lb 3.65 - —
Thiamine hydrochloride, USP, 6b dms., frt. alld kilo. 27.00 - —
Thiamine mononitrate, USP, 6b dms., frt. alld kilo. 27.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb 76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works lb. 6.20 - —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis lb 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech, bgs., t.l. frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., 6b dms., 100-lb lots or more, works lb 3.50 - —
dl-Threonine, dms., 25 kilos, works, kilo. 115.00 - —
Thyme leaves, French, triple sifted extra, bgs lb. .25 - —
Spanish, extra, bgs lb. .11 - —
reg., bgs. lb. .08 - —
Thyme oil, NF, red, cns., dms. lb. 3.25 - 3.60
NF, white, cns lb. 3.50 - 3.95
Tech., white, cns lb. .80 - 1.10
Thymol, 6b dms., 25-lbs., f.o.b. works lb 2.45 - —
Thymol iodide, NF, dms., 100-lbs f.o.b. works lb 7.30 - —
Timbo root (see Lime root).
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.20½- —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, all grades, bgs., 20-ton c.l. min. frt. alld. lb. .25 - —
20-ton c.l. min. frt. alld. lb. .25½- —
bgs., l.c.l., same basis lb. .26 - .26½
Titanium dioxide, rutile, all grades, bgs., 20-ton c.l. min. frt. aid .27 - —
20-ton c.l. min. frt. alld. lb. .27½- —
bgs., l.c.l., same basis lb. .28 - .28½
metallurgical nat., bgs., c.l., f.o.b. Jacksonville Fla. ton.180.00 - —
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y ton.205.00 - —
bgs. ton lots, same basis ton.215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide calcium pigment, 30% Ti O_2, reg. bgs., 30-ton c.l. f.o.b lb. .09½- —
20-ton c.l., works lb. .09½- —
bgs., l.c.l., works lb. .09½- —
50% Ti O_2, high-tinting, dms., 30-ton c.l lb. .14½- —
20-ton c.l., works lb. .14½- —
dms. c.c.a. lb. .14½- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech. dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l., 20,000 min., f.o.b. plant, frt. alld. E lb. .81 - —
dms., l.c.l., l.t.l., 5,000-lbs.-19,999 lbs., same basis to .81½- —
dms., l.c.l., l.t.l., less than 5,000 lbs., same basis lb. .84 - —
For west coast delivery add 2c. per lb.
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo.67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo.109.00 - —
dl-a-Tocopherol, bots. kilo.99.00 - —
dl-a-Tocopheryl acetate, bots kilo.90.00 - —
25% dry. powd., bots kilo.22.50 -24.00
33⅓% dry powd. bots. kilo.30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste, kgs., 100% basis lb 1.50 - —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb 1.50 - —
Tolu balsam, cns. lb. 4.00 - 4.50
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25½- —
Petroleum, indust., tanks, dlvd. gal. .25½- —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms. t.l.l. same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt alld lb .16 - —
1,000-lb or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c per lb more.
p-Toluenesulfonic acid mononydrate, dms. c.l., or t.l lb. .90 - —
dms. 125 lbs. to t.l. lb 1.00 - —
m-Toluidine, dms. c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .26 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms., frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, prime f.o.b., N.Y. lb. 1.35 - 1.50
Brazilian, Surinam, cs., same basis lb. 1.00 - 1.10
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms. l.c.l. t.l.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb 4.10 4.20
No. 2, cs. lb 3.75 3.80
No. 3, cs. lb 3.40 3.65
USP powd., bbls. lb 1.05 1.15
Triacetin, dms. c.l., dlvd. E. of Rockies lb. .38 - —
dms., l.c.l., same basis lb. .29½- —
tanks, same basis lb. .35½- —
Triallylamine, dms., c.l., dlvd lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver. lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld E of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms. l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin, dms. l.c.l. dlvd lb .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b works lb .52 - —
USP, 100-lb dms., frt. equald lb. 1.25 - —
Trichlorobenzene, dms. c.l. frt. alld E lb .15 - —
dms., l.c.l. frt. alld. E. lb .16 - —
tanks, frt. alld. E. lb 13¼ - —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb .13¼ - —
dms., l.c.l., dlvd lb .16 - —
tanks, dlvd lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene, dms. c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd. lb. .14¾- .15¼
tanks, dlvd. lb. .12 - —
Trichloroisocyanuric acid, dms., c.l., t.l. frt equald lb .65 - —
dms. l.c.l. same basis lb .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., non-ret., dms., 1 dm., frt. equald kilo. 3.10 - —
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks dlvd lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .35 - —
dms., l.c.l. dlvd. lb. .36 - —
tanks dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .22½- —
dms., l.c.l., dlvd. E lb. .24 - —
tanks, dlvd. E lb. .20 - —
Triethanolamine, dms., c.l., dlvd, E. lb. .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l. frt. alld lb. .25½- —
dms. t.l.l. frt alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine, dms. c.l., dlvd E. lb. .50 - —
dms. l.c.l. same basis lb .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .47¼- —
tanks frt alld E of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb .40½- —
dms. l.c.l., dlvd. lb. 42 - —
tanks, dlvd lb. 38 - —
Triethylene glycol, dms. c.l. dlvd. E lb. .21 - —
Triethylene glycol, dms., l.c.l., dlvd. E lb .22½- —
tanks, dlvd E lb. .18½- —
HP, tanks, dlvd. E lb. .20 - —
Triethylenetetramine, dms., c.l., dlvd. E lb. .48½- .48¾
dms., l.c.l., same basis lb. .50 - .50¼
tanks, same basis lb. .46 - —
Triisobutylene, tanks, dlvd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms. l.c.l., dlvd E lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks frt equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35½- —
dms. l.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .30½- —
dms., l.c.l., l.t.l., same basis lb. .31½- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms. l.c.l. works lb. 51½- —
Tripentaerythritol, ugs., c.l., t.l., dlvd E lb. .34 - —
bgs., l.c.l., t.l.l., dlvd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls. l.c.l. frt. equald lb. 43½- —
Triphenylguanidine, bbls. works lb. .90 - —
Tripropylene dms. c.l., dlvd. E gal. .44 - —
dms., l.c.l. same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt alld E lb. .20½- —
dms. l.c.l. t.l.l. frt alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld E lb. .17½- —
Tripropylene, glycol, tankwagon and compartmented, tankwagon, 1,000 gals., min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c per lb higher in west
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Trypophane, dms., 1 kilo, works. kilo.154.00 - —
Tung oil, dms., New York lb. .32 - .32½
tanks, imported lb. .30¼- .30½
tanks, domestic, mills lb. .30½- Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turkey red, bbls. works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 - .50
Tuscan red bbls. frt. equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos, gram. .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb bbls., dlvd. E. of Rockies lb. .33½- .38
Ultramarine blue, jobbing types, dry, bbls., same basis lb. .18 - .19
Regular types, dry bbls., same basis lb. .25 - .40½
Ultramarine blue prices 1c higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l. works lb. .07¾- .08
turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼- —
Raw, American, bgs. works lb. .07¾- .08¼
Turkey type, bgs., works lb. .08½- .08¾
Undecylenic acid, 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust. bgs., c.l., t.l., f.o.b. plant ton.100.00 - —
Urea, feed grade, c.l., t.l., f.o.b. plant ton.95.00 - —
45% N, agricultural, bgs., c.l. f.o.b. plant ton.91.25 - —
Bulk, c.l., t.l., same basis ton.85.25 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 - —
37 grade, tanks, same basis ton.145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —
dms. t.l.l., same basis lb. .70 - —
Uva-Ursi leaves, bls. lb. .14 - .15

V

Valerian root, Belgian bgs. lb. .32 - —
Indian, bgs lb. .25 - —
dl-Valine, dms., 1 kilo, works kilo.37.00 - —
Vanadium pentoxide, tech., dms., works lb. 1.38 - —
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb. 6.75 - 7.00
Mexican cuts, tins lb. 7.50 - 7.70
whole, tins lb. 7.80 - 8.00
Vanillin ex lignin, 100-lb fib. dms., 2,000-lb. lots or more lb. 3.00 - —
less than 2,000 lbs lb. 3.20 - 3.30
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, cns lb.17.00 -17.25
Haitian, cns. lb.10.00 -12.00
Victoria blue toner, bbls., dms., PMA, 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb bbls., dlvd. E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810- —
55-gal. dms. l.c.l., dlvd lb. .1960- —
tanks, dlvd. lb. .1560- —
tanktrucks less than 4,000 gal., dlvd lb. lb. .1610- —
Vinyl n-butyl ether, tech. dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works, min. frt. equald E. lb. .0750- —
Vinyl ether, USP, anesthesia, bots., 50cc. hospitals bot 1.12 - —
bots., 75cc. hospitals bot 1.56 - —
Vinyl ethyl ether tech. dms., c.l., works lb. .30¼- —
dms., l.c.l., works lb. .31 - —
tanks, works lb. .28¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 - —
dms. l.c.l. same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 - —
1 to 9 dms., works lb. 1.35 - —
tanks, works lb. 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., dest. frt. paid, Zone 1 lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14 - —
Zone 2 prices are 1c. per lb. higher. Zone 1 is East of Rockies. Zone 2 is West of Rockies.
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 - —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.47.50 - —
325,000 units per gram, same basis kilo.30.88 - —
250,000 units per gram, same basis kilo.23.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units. .07 - —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .07 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.45.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .57 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms., gram. .57 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.52.00 - —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 52.00 - —
Vitamin B_{12}, 0.1% trituration of cyanocobalmin, USP, with dicalcium phosphate or mannitol gm.52.00 - —
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram.52.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram. .57 - —
Vitamin B_{12}, 0.1% cobalamin concentrate in gelatin, 1-10 kilo. dms., frt. alld gram. .57 - —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram less than kilo lots kilo.45.00 —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls lb. 2.10 - —
Warfarin, 0.5% dms., 50-lb. lots, dlvd lb. 1.95 - —
dms. 25-49-lb. lots, New York or Chicago lb 2.05 - —
dms. 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES

Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb 21 - .22
White precipitate, USP, powd., dms., 100 lbs. f.o.b works lb 5.50 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. 22 - —
Wintergreen oil, USP, nat. northern, cns lb. 6.35 -17.50
USP, nat. southern cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .20 - .25
Witch hazel leaves, bls. lb. .35 - .40
Wollastonite fine paint grade, bgs., c.l., works ton.41.00 - —
bgs., l.c.l., ex whse ton.51.00 - —
medium paint grade, bgs., c.l., works ton.[illegible].00 - —
bgs., l.c.l., ex whse. ton.39.00 - —
Wood alcohol (see methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed, Levant, bgs lb 2.50 - —
Wormseed oil (see Chenopodium oil NF)
Wormwood oil, cns lb. 4.75 - —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N.Y. gal. .28½- —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown, Ohio gal. .30 - —
Minnequa, Col. gal. .29 - —
Philadelphia dist. gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal. .29 - —
Syracuse gal. .29 - —
Terre Haute, Ind. gal .29 - —
Youngstown, Ohio gal. .29 - —
Xylene, petroleum, indust., tanks, f.o.b. works:
Bayonne, N. J. gal. .29 - —
Baytown, Tex. gal. .27 - —
Charleston, S. C. gal. .29 - —
Chicago, Ill. gal. .28½- —
Detroit, Mich., dlvd. gal. .27½- —
Houston, Tex. gal. .27 - —
Philadelphia, Pa. gal. .29 - —
Providence, R. I. gal. .30 - —
Sewell's Point, Va. gal. .28 - —
Wood River, Ill. gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif. lb. .21 - —
dms., l.c.l. f.o.b., Richmond, Calif. lb. .22 - —
tanks, frt. alld. lb. .19 - —
o-Xylene, dms., c.l., works lb. .08 - —
dms., l.c.l., works lb. .09 - —
tanks, works lb. .06 - .06½
p-Xylene, dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .21 - —
tanks, frt. alld lb. .1645- —
Xylenol cryst, 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 - —
56°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .33 - —
60°-62°C., m.p., dms., l.c.l., same basis lb. .40 - —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal 1.25 - —
dms., l.c.l., same basis gal 1.30 - —
tanks, same basis gal. 1.05 - —
b.r. 7°-9° C., dry at or below 227° C., dms. c.l., same basis. gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 - —
2,5-Xylidine, tech., dms., frt. alld. lb 1.20 - —
Xylidines, mixed o-m-p, dms., c.l., or t.l., works lb. .39 - —
dms., l.c.l. same basis lb. 40 - —
tanks, same basis lb. .38 - —

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces dlvd lb. .27 - —
Yeast, primary, USP XV, 1.0 meg. B_1 per gram, 100-lb. dms lb. .47 - —
USP XV, 270 meg., B_1 per gram, 100-lb dms lb. .52 - —
primary, USP, XV, 300 meg., B_1 per gram, 100-lb., dms. lb. .56 - —

Yeast, primary, USP XV, 900 meg. B_1 per gram, 199-lb. dms.	lb.	.60	—
Torula, USP, dlvd.	lb.	.18	—

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls.	lb.	.40	.45
Ylang Ylang oil, Bourbon, bots.	lb.	7.00	-22.00
extra, bots	lb.	24.00	-33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	- 4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works	lb.	.37	—
50-lb. bgs., smaller lots, f.o.b. works	lb.	.41	.44
Zinc acetate, NF, VIII, dms	lb.	.53	—
Tech., dms., l.t.l., works	lb.	.2950-	—
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.25	—
bgs., less than 1,000 lbs., same basis	lb.	.27	—
Zinc chloride, NF, gran., dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech., soln., 50%, dms., c.l., works 100 lbs.		5.80	—
dms., l.c.l., works 100 lbs.		6.40	—
tanks, works 100 lbs.		5.15	—
fused, dms, c.l., works 100 lbs.		10.70	—
dms., l.c.l. works 100lbs.		11.20	—
Tech, gran., fib, dms., c.l., work 100 lbs.		11.45	—
fib dms, l.c.l. works 100 lbs.		11.95	—
Zinc chromate bbls., dlvd.	lb.	.29	—
Basic bbls., dlvd.	lb.	.34	—
Zinc cyanide dms., 1,000-lb. lots or more, works	lb.	.55	—
dms., smaller lots, works	lb.	.57	—
Zinc dust coml. bbls., c.l., works.	lb.	.16	—
Pigment, bbls., c.l., works	lb.	.15½-	—
bbls., l.c.l., works	lb.	.17¼-	—
Zinc fluoride, bbls., works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½-	—
dms., l.c.l., frt. alld.	lb.	.23½-	—
Zinc metal, prime western, slabs, E. St. Louis	lb.	.11½-	—
Prime western slabs, New York.	lb.	.12	—
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn., dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., flake, 100-lb. fib. dms., l.c.l.	lb.	.16½-	—
300-lb. fib. dms, l.c.l.	lb.	.14½-	—
300-lb. fib dms., c.l.	lb.	.14	—
Zinc oxide pigment, American process, lead-free bgs., c.l., f.o.b. works	lb.	.12½-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.13	—
bgs., l.c.l., smaller lots, same basis	lb.	.13½-	—
Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b. works	lb.	.14	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.14½-	—
Zinc oxide, pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis	lb.	.14½-	—
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b. works	lb.	.14½-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	—
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis	lb.	.14½-	—
red seal, bgs. c.l. same basis.	lb.	.14	—
Zinc oxide, French process, white seal, bgs., l.c.l., 10 tons or more, same basis	lb.	.15	—
bgs., l.c.l., smaller lots, same basis	lb.	.15½-	—
same basis	lb.	.15¾-	—
Zinc oxide, white seal, bgs., c.l., same basis	lb.	.14¾-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15½-	—
bgs., l.c.l., smaller lots, same basis	lb.	.15¾-	—
Zinc oxide, USP, 50 lb.-dms., c.l., frt. alld.	lb.	.16¼-	—
50 lb.-dms., l.c.l., 10 tons or more, same basis	lb.	.16¾-	—
50 lb.-dms., l.c.l., smaller lots, same basis	lb.	.17¼-	—
Zinc phenolsulfonate, NF, gran., dms	lb.	.43	.46
NF, powd., dms.	lb.	.48	.49
Zinc resinate, precip. 7.2-7.6% Zn., dms., frt. alld	lb.	.45	—
Zinc silicofluoride, dms., works	lb.	.13½-	.14
Zinc stearate, USP, ctns., c.l.	lb.	.41	—
	lb.	.41	—
ctns., l.c.l.	lb.	.42	.46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E.	100 lbs.	8.00	—
bgs., l.c.l., dlvd. E.	100 lbs.	9.00	—
Zinc sulfate in bbls 40c higher.			
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04	—
Zinc, yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls., c.l., works	100 lbs.	10.85	—
bbls., l.c.l., works	100 lbs.	11.35	—
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld	lb.	.26	—
Normal, 250-lb. dms., frt. alld	lb.	.55	—
bgs., 5 tons to c.l., works	lb.	.03½-	—
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅝-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04	—
bgs., smaller lots, works	lb.	.06½-	—
Zircon (G) milled, bgs., c.l., works.	lb.	.04⅛-	—
bgs., 5 tons to c.l., works	lb.	.04⅜-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝-	—
bgs., 500-1,999-lb. lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23	—
Zirconium hydride powd. electronic grade, dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls or bgs., works	lb.	1.50	—
Electric-fused lump, bgs., 500 to 1,999-lb lots, works	lb.	.48½-	—
bgs., smaller lots, works	lb.	.51	—
milled, bgs., c.l., works	lb.	.62	—
bgs., 5-ton lots, works	lb.	.62½-	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½-	—
bgs., 500 to 1,999-lb. lots, works	lb.	.64	—
bgs. smaller lots, works	lb.	.66	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	.30
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½-	—

Dow Names Johnson Head Of Farm Chemicals Dep't

Dr. Julius E. Johnson, director of agricultural chemicals research for Dow Chemical Company, has been named manager of the company's agricultural chemicals department. Mr. Johnson's new responsibilities will include overall direction of research, development, and product planning activities in the agricultural field.

Mr. Johnson succeeds J. W. Britton who has headed Dow's agricultural operations since 1949. For the next year Mr. Britton will serve on special assignment in executive research.

Chemical Selling

—Continued from page 7

to competitors, but in other instances it matched discounts granted by competitors and thus was able to get new business.

In an initial decision filed last February 20, hearing examiner William L. Pack had ordered dismissal of the complaint on the ground that the concern had established a valid defense under section 2(b).

The examiner ruled that in granting the challenged lower prices, Sunshine was meeting in good faith equally low prices of competitors and was entitled to take this action with respect to new customers as well as old.

Vacating the initial decision, the commission held that the examiner erred in his interpretation of the 2(b) proviso and that it cannot be used as an excuse for price discriminations granted to get new

Soviets Moving Fast

—Continued from page 4

put is slated for a 95 percent boost in 1965 over 1958.

Last year, output of polyvinyl chloride was boosted by 22,000 tons owing to debottlenecking of the plant, and without adding equipment. Some 30 million rubles went into expansion of ethylene oxide output at Gorkiy, doubling production.

Ammonia is being produced from natural gas at the Chernorechensk chemical plant. Plants producing phenol, DDT, formalglycol, wetting agents and other products are being expanded.

Production of polyvinyl chloride by hydrochlorination of acetylene has started, boosting annual output by 9,000 tons. Output of dehydrated ethylene chlorohydrin, formerly imported from abroad, has also begun. Ethyl mercaptan production has been boosted 40 percent.

Tuloma Gas to Market Nitrogen Fertilizer Line

Tuloma Gas Products Company, Tulsa, Okla., has expanded its nationwide marketing program for liquefied petroleum gas and related products to include the line of nitrogen fertilizers formerly sold by affiliated American Oil Company.

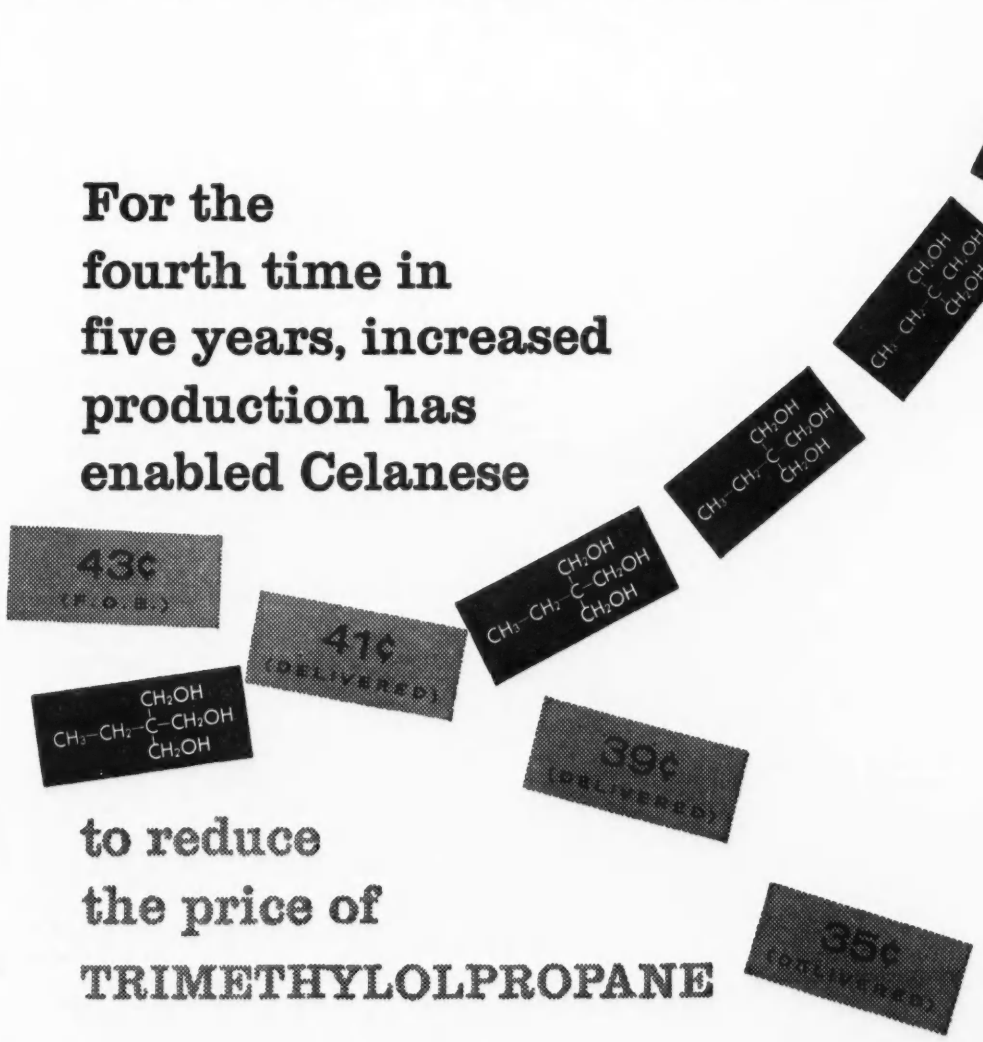
Standard Oil Company (Indiana), which owns both companies, says the marketing move complements a reorganization of January 1, 1961, under which American Oil became Standard's nationwide marketer of basic petroleum products. Previously American Oil had handled all nitrogen product sales.

C. J. Struble, of Chicago, manager of nitrogen products sales for American Oil, has joined Tuloma at Tulsa as vice-president of nitrogen products, and a director. K. G. Blanchard, of Tulsa, a director, is vice-president, for LP-Gas.

Baker Dedicates Waste Unit

J. T. Baker Chemical Company has dedicated a $300,000 effluent-treating facility at its Phillipsburg, N. J., plant. The new system treats 3.5 million gallons of effluent a day and covers almost two acres.

For the fourth time in five years, increased production has enabled Celanese



to reduce the price of TRIMETHYLOLPROPANE

Celanese trimethylolpropane—the ideal intermediate for producing alkyd resins—is now available at the lowest price in its history: *30.5¢ per pound.* That means you can get all the many advantages of trimethylolpropane—and save money at the same time.

Alkyd resins made with trimethylolpropane are characterized by excellent color and high solids at usual viscosity levels. The resultant pigmented coatings demonstrate high hardness and good flexibility, superior alkali resistance, and excellent color and gloss retention . . . even after weathering. Adhesion, impact resistance, and ability to withstand heat are also outstanding.

At this new low price, you simply can't afford *not* to investigate the advantages of trimethylolpropane in your application. For information, please write, briefly outlining the use you have in mind. Celanese Chemical Company, Dept. 656-J, 522 Fifth Ave., N.Y. 36.

Celanese®

Celanese CHEMICALS

*Zone I Carload Price (per pound) Zone II Price: 31.5¢ (Ariz., Calif., Idaho, Mont., Nev., Ore., Utah, Wash.)

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EDITOR AND PUBLISHER: William S. Auchincloss
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MANAGING EDITOR: Arthur R. Kavaler
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NEWS EDITOR: Gene Gasteiger
OPD SPECIAL REPORTS: Don L. Richards
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IMPORTS: Mary Van Grieff
CONSULTING EDITOR: Hugh Craig
WASHINGTON EDITOR: Ralph L. Cherry, 956 National Press Building, Washington 4, D.C.
EUROPEAN EDITOR: Clare M. Cotton, 26A Wellington Road, London NW 8, England
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PRESIDENT: William S. Auchincloss
VICE-PRESIDENT: Jean Schnell Auchincloss
TREASURER: William S. Auchincloss
ASSISTANT TREASURER: Ruth D. Johnson
SECRETARY: Anne L. Koch
ASSISTANT SECRETARIES: J. Stuart Auchincloss, Sara Jane Auchincloss

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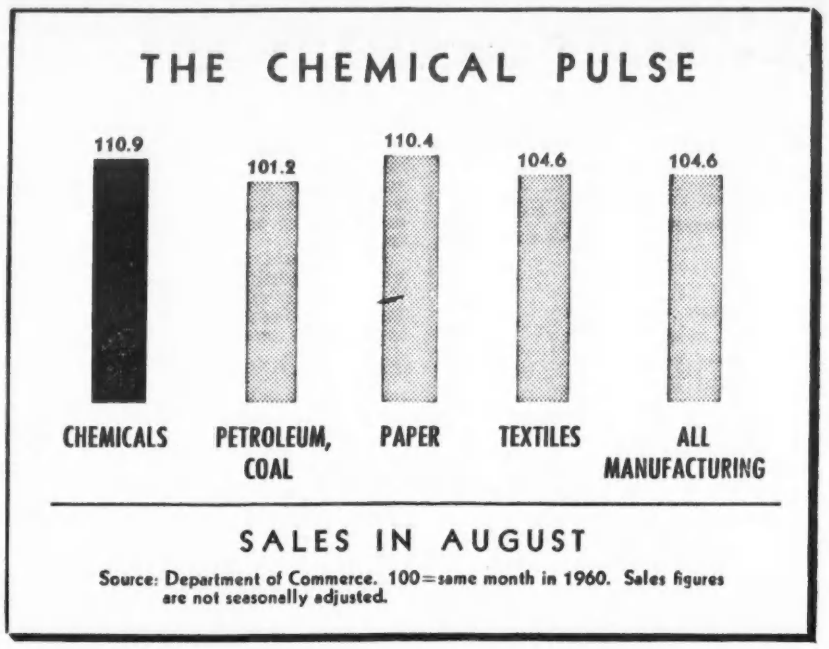


Health-Care Projects

The Health Commissioner of the City of New York told the state legislature a short time ago about the department's plans for a cohesive service that would be comprehensive, continuous, family-centered, and preventive. The present service, she said, was a loose-jointed operation by at least a half dozen agencies. Because of their interests and capabilities in preventive and remedial roles, the chemical and drug trades should get in on the promotion of that new idea.

The two groups should also participate fully in contributions to the various aspects of the program of the annual conference of the New Jersey Health Association which opens October 24 at the Berkeley-Carteret hotel in Asbury Park; special part of the program will have to do with this country's latest threat of a plague by reason of the increasing prevalence of infectious hepatitis.

Among other topics scheduled for discussion is the controversial one, medical care for the aged.

All those in business management, whatever may be the field of its activity, should dig in and learn all that they can about the agreement signed a few months ago between a labor-management group in the hotel industry and two New York hospitals, under which, full hospital, home, and office medical care is to be provided for nine thousand hotel employees and their dependents. The management-labor group is the Union Family Medical Fund of the Hotel Industry of New York City. It is financed by employer contributions and will outlay $290,000 for the first year of the "pilot" project. Giving due consideration to the semantics of that term, "pilot," it is to be expected that, in the due course of union "progress," similar projects will before long be set going in other industries. In view of what is provided under the hotel project, such "progress" would mean good business of all groups engaged in the serving of the various requirements in health care, beginning with sanitation.

Looking and Learning

It is not only those in the chemical industry who should—really must—look at and learn from official trends in business regulation such as those presented in the rulings of the federal courts, especially at the top level. There is some useful guidance in that direction in the article on page 5 last week.

Management in all industries has at least as much reason as that in the chemical field to take those lessons, not only with respect to pricing practices—and malpractices—but in all the areas in which the item on business news, on page 4, has particular pertinence. The major thing to be learned is how laws and regulations might be made more readily intelligible. Next in order comes the need for mutual understanding set forth in the last paragraph of that item. It is in that field that government is in dire need of better qualified, more thoughtfully selected advisers on the why of business practices and the how of their being made more considerately adaptable to the proper, fully respectful service of the public.

Will the newly-created BDSA Office of Industrial Materials be able to provide the industries with which it will have to do with a means of getting the knowledge that they should have? The answering of that question must await the development of adequate mutual understanding. The same question and the same answering apply with equal pertinence to the other two new offices in the BDSA makeup.

The National Association of Manufacturers and those in all industries that have such organizations must team up with the new BDSA units in an earnest, serious endeavor, with full openmindedness on both sides, and to assure its making proper progress in that respect.

Public Relations Job

Drugdom—industry, trade, and profession—is faced with an obligation to present to the public an image that is more in keeping with factual factors than is that which has been set up by the Kefauver overstressing—yes, inventing—of delinquencies. The group will be provided with some very useful appropriate material by way of what has been and will be testified at the congressional hearings on the patents aspects of the legislative component of the Kefauver campaign of defamation.

The national drug associations, as represented in the National Drug Trade Conference, should now analyze that material with all the diligence of a most important research undertaking. Out of that analysis it should be possible to get the makings of an image that is an image. And that image should be constructed in the form of a printed message which should be laid before the public in a vigorous nationwide campaign of public relations.

It is reasonable to believe that the Kefauver picture of drugdom has not had more than a slight passing impression upon those who have seen what has been printed in the daily press about his ravings. But, human nature being what it is pyschologically, it must be expected that, if the drug folks take what he says, keeping quiet, there will be a more or less progressive development of a public conclusion that there must be some truth in it. So, the public relations job with which those folks are faced has a preventive, as well as a remedial, necessity that must be effectively met.

Meetings

American Coke & Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 23-24.

American Oil Chemists' Society, fall meeting, Pick-Congress hotel, Chicago, October 30-November 1.

Association of American Feed Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 26-28.

Association of American Soap & Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 24-26.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 30-November 1.

Chemical Bureau Alumni Association, fall get-together, Washington hotel, Washington, D. C., November 9.

Chemical Finishing Conference, sponsored by National Cotton Council, Sheraton Park hotel, Washington, D. C., November 8-9.

Chemical Market Research Association, Mark Hopkins hotel, San Francisco, November 28-December 1.

Chemical Specialties Manufacturers Association, annual meeting, Roosevelt hotel, New York, December 4-6.

Drug, Chemical & Allied Trades Committee of Young Men's Board of Trade, annual luncheon, Commodore hotel, New York, October 31.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, D. C., November 2-4.

Industrial Hygiene Foundation, annual meeting, Mellon Institute, Pittsburgh, Pa., October 25-26.

Manufacturing Chemists' Association, semi-annual meeting and midyear conference, Commodore hotel, New York, November 21.

National Agricultural Chemicals Association, annual meeting, The Homestead, Hot Springs, Va., October 29-November 1.

National Paint, Varnish & Lacquer Association, annual meeting, Statler-Hilton hotel, Washington, D. C., October 30-November 1.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 11-12.

Salesmen's Association of the American Chemical Industry, annual meeting, Roosevelt hotel, New York, October 24; Christmas party, Waldorf-Astoria hotel, New York, December 13.

Society of Cosmetic Chemists, annual meeting, Biltmore hotel, New York, November 28.

Society of the Plastics Industry, plastic film, sheeting and coated fabrics conference Pierre hotel, New York, December 7-8.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, New York, November 14.

Toilet Goods Association, scientific section meeting, Waldorf-Astoria hotel, New York, November 29.

Washington Talks It Over

Stickers and Tags: That Is FDA's Bright, New Idea About the Hazardous Labeling Law, But the Chemical Industry Doesn't Think a Great Deal of It on the Whole.

By Ralph L. Cherry
Washington Editor

Food & Drug Administration has suggested that chemical manufacturers and others can bring themselves into compliance with the new hazardous articles labeling law—if they haven't already done so by the February 1 deadline—by the use of label stickers or tags containing the required warning statements.

The suggestion leaves the chemical industry just a little bit cold, for it indicates a complete lack of FDA knowledge on the packaging problems that face an industry suddenly called upon to revise its labels.

It might be possible in the case of a few small manufacturers or wholesalers to make use of stickers or tags while they are waiting for new labels to be printed and delivered, but in the case of a vast majority of manufacturers it is just impractical.

All one needs to do to be convinced of this fact is to visit the warehouse of some of the larger producers once and look at the mountains of cartons of containers stacked and ready for use. The task involved in ripping open every carton and manually tagging or relabeling every individual container is simply out of the question.

This, and one other, is the reason why more and more trade organizations are joining together in support of a movement to have the February 1 effective date of the new law shoved back. Most of them feel that another full year will be needed to get ready for the law.

The other reason why an extension of the effective date is imperative has to do with the matter of product liability.

Suppose a firm did take advantage of the relaxed rule on labeling and used a sticker or tag which became dislodged before the article was purchased by the housewife, and the purchaser later suffered injury from the article. Where would the manufacturer stand as regards to the matter of product liability in the absence of an act of congress extending the effective date of the labeling law?

Lawyers say that this presents a fine legal question that would have to be decided by the courts—something that few manufacturers care to look forward to.

Magnesium Market Picks Up Steam, Operating Rate to Rise Next Year

After a halting start, production and shipments of magnesium metal are now likely to chalk up further gains in 1961, a spokesman for the industry says. Both should finish slightly ahead of 1960 when production was 40,070 tons and shipments 54,350 tons. So far, output during the first nine months has totaled 29,485 tons, a shade above the 29,350 tons turned out in the same period of 1960, according to figures from Business & Defense Services Administration. The pace was maintained in spite of Hurricane Carla which interfered with production at the nation's only large operating facility — a 36,000-ton electrolytic plant in Freeport, Tex.

A significant development this year is the substantial trimming of inventories that has taken place at consuming as well as producing plants. This should act as a strong stimulus to production and shipments in the months ahead.

The major US producer expects its operating rate to increase from a current 50 percent to 65 percent within the next six months, representing both the reduction in inventory and an across-the-board increase in consumption.

Sales this year are expected to show a 6 percent increase, a growth rate that is likely to carry through next year.

Prospects for increasing the market's rate of expansion are said to hinge upon the development of economical die-casting methods that will favor magnesium over aluminum and other competitors.

What it amounts to is increasing magnesium's share at the expense of other metals. This is a good long range possibility in the automotive industry, but no significant stride forward is expected in the immediate future.

American cars use about one pound of magnesium as against forty-seven pounds in the Volkswagen. The difference is, of course, that the Volkswagen has a comparatively low-powered motor, so that lightness of the body is more important than in a high-powered American car.

Hence, the higher tab on magnesium (34½ cents a pound as against 22 cents for aluminum) continues to favor aluminum as the major component in structural alloys. A breakthrough in costs or a trend to low-horse power cars could change the picture considerably.

Price Trends

Advanced
None

Reduced
Tin, Straits, ¾c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
106.63	106.63	106.63	106.88

For Current Prices See Page 9

Acids

Hydrochloric—Failure of steel demand to pick up as sharply as anticipated is expected to have production levelling off during the next few weeks. Steel men still hope, however, for brisk consumption later in the quarter.

So far, disappointment has focused on the failure of auto makers and other users to build up inventory. Even when actual needs have increased, buyers still show preference for a hand to mouth policy.

Hydrofluoric—Sparked by Atomic Energy Procurement, the HF market remains active and steady. A sharp price cut a while back was the result of competition for markets rather than a reflection of weak demand, trade sources say.

Nitric—Price patterns remain steady. The chemical industry has stepped up its requirements, and while the steel picture has lost some of its recent luster, production is at least expected to hold its own in the weeks ahead.

Sulfuric—Steel production during the week ended October 14 totaled 2,071,000, representing a slight decline from the previous week's 2,102,000 tons, the American Iron & Steel Institute reports.

For the year to date, steel output stands at 74,622,000 tons, which compares with 82,902,000 in the corresponding period of 1960.

Paper Production Higher

The American Paper & Pulp Association reported paper production for the week ended Oct. 20 at 93.8 percent of theoretical capacity, as compared with the revised figure of 93.2 percent for the previous week and 95.3 percent for the corresponding week of last year.

Bases and Salts

Aluminum Sulfate—Alum sales continue to follow the seasonally upward trend of paper production. Supplies are adequate, and prices steady.

Bureau of the Census reports August production of paper and board at 3,165,281 tons, 7 percent above the 2,954,173 tons produced in August a year ago, and 17 percent above the 2,696,936 tons reported for July 1961.

Paper production amounted to 1,353,717 tons, up 5 percent from August a year ago, and up 16 percent from July.

Production of paperboard during August was 1,485,750 tons, a 9 percent advance over last August and 19 percent better than the July figure.

Copper Sulfate—Shipments of copper sulfate in the US fell to 2,700 tons in August, down 26 percent from July and the lowest since October 1959.

Production rose 4 percent and was almost 1,000 tons higher than shipments, according to the Bureau of Mines. Stocks rose 18 percent during the month to close at 5,916 tons, as compared with 5,028 a month earlier.

Imports in August totaled thirty-five tons—thirty tons from West Germany and five from the United Kingdom. Exports were eighteen tons.

Sodium Sulfate—Many mills have posted $10 price hikes for Kraft paper, but there is some question as to whether the advances will stick.

Attributing the boosts to fears of a price freeze by the government in the worsening international situation, a purchasing association publication says:

"Buyers are justified in resisting this price increase, and professional buyers should negotiate prices at last year's level."

Sulfur—The following figures from the Bureau of Mines show output, shipments, sales, stocks and imports of sulfur for specified periods, in long tons.

	July	June
Native sulfur:		
Production	487,283	474,528
Shipments	414,566	437,678
Sales	347,744	486,954
Stocks	3,969,423	3,829,884
Recovered sulfur:		
Production	67,685	*72,053
Shipments	59,768	*71,439
Sales	57,185	*71,269
Stocks	116,941	*106,441
Imports:		
Ore, Canada	6,626	4,786
Mexico	5,600	7,026
In any form, Canada	7,329	9,954
Mexico	62,112	67,231

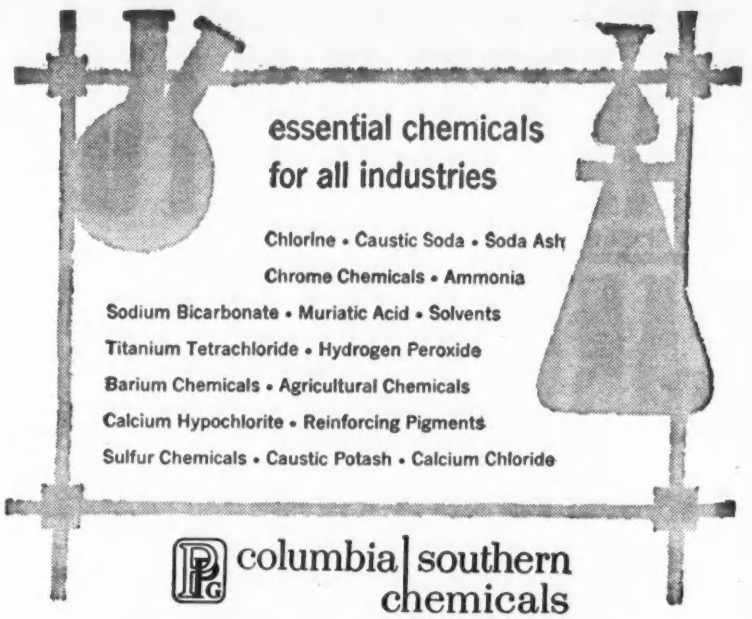
* Revised.

Nonferrous Metals

Aluminum—Exports of aluminum from the US dropped sharply in August, Business & Defense Services Administration reports. The total was 16 million pounds, as compared with 29 million in July.

Six countries accounted for 70 percent of the shipments. They were United Kingdom, 4.5 million pounds, Japan 1.8 million, Australia 1.7 million, Colombia 1.2 million, West Germany 1.2 million and Argentina 1.1 million.

During the first eight months of 1961, exports have totaled 183 million pounds, down from 419 million in the same months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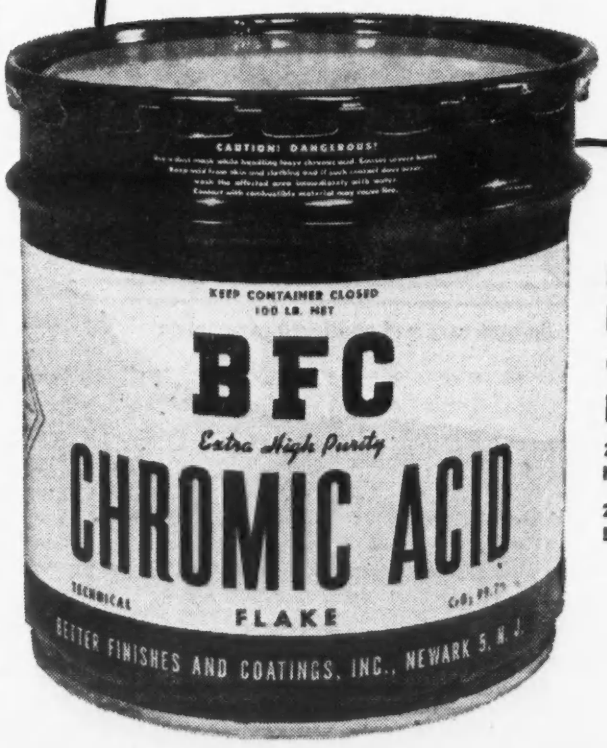

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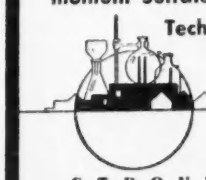

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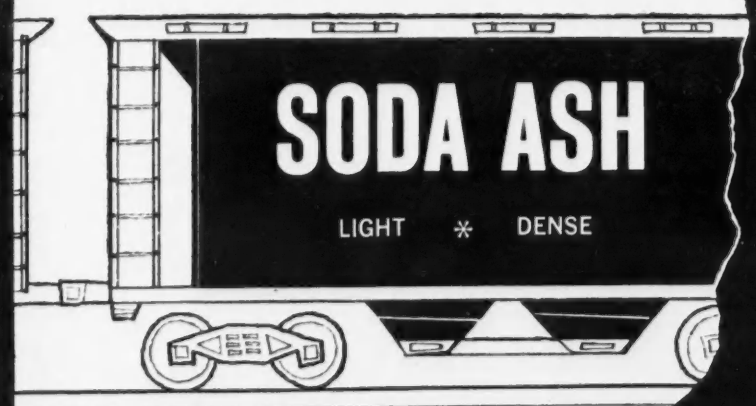

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Heavy Chemicals

of 1960. The drop is accounted for by heavy foreign inventories.

Copper — World deliveries of copper rose to 305,709 short tons in September from 290,626 in August, the Copper Institute reports.

Together with a decline of refined production to 281,942 tons from 288,217, this effected a welcome reduction in stocks. At months end, producers' inventories totaled 403,671 tons, down from 424,912 a month earlier.

Crude primary production was 277,069 tons, up from 256,438 tons, while secondary output reached 13,151 tons, up from 11,069.

In the US, a similar pattern emerged. Deliveries rose in 126,744 tons in September from 121,484 tons. Stocks fell to 77,813 tons from 95,177. Refined output of 126,744 tons was sharply below the previous month's 145,861, while crude output rose sharply, totaling 98,666 tons as compared with August's 86,316 tons.

Receipts of purchased copper-base scrap at brass mills in the US in August totaled 30,900 tons, up 52 percent from July, the Mines Bureau reports.

Consumption of all scrap rose to 97,100 tons, up 67 percent from July and the highest since April 1959, the bureau notes.

Tin—Sales were light, prices dropping to $1.20½ a pound, spot, Friday.

Heavy Chemical Briefs

BRUSH BERYLLIUM ON STREAM: Brush Beryllium Company has dedicated a new plant at Cleveland, Ohio, for fabricating beryllium. The facility, which consolidates work previously done at three locations, is one step in a $15 million expansion program.

CHEMPLATE MOVES: Chemplate, Inc., reportedly the west's largest specialist in electrolytic nickel plating, has completed its move into a new $350,000 plant at 4355 Sheila street in Los Angeles. Chemplate uses the Kanigen process to apply a nickel-phosphorus coating to electronic, missile, atomic energy and industrial components.

GSA OFFERS CHROMITE: A plan to dispose of 1,890 tons of chromite in the strategic stockpile has been submitted to congress by General Services Administration. The material, equivalent to about one-fourth of annual US consumption, has been declared excess to national needs. The disposal plan will be implemented upon the express approval of congress.

INDUSSA REPORTS: World production of antimony continues to lag in relation to the brisk demand, according to a report from Indussa Corporation, of New York. Offers of Chinese antimony to European customers are said to be limited, and supplies of North African ore reportedly have dried up. Nor have any recent offers been reported from Bolivia.

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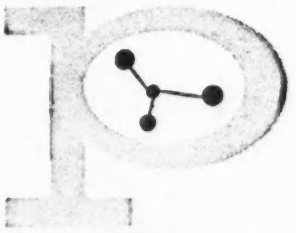

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OPD Reports From Europe

Chemical Men's Complaint: Dumping

—*Continued from page 5*

drop sharply in the next two or three years.

Hoechst officials, reviewing the current year, note an average drop in prices of about 4 percent but add that sales gains continue well above average for dyestuffs and textile products. Hoechst exports are up slightly from 32.7 percent of total volume for 1960 to a current 33 percent of total sales.

Solvents and plastics, according to German industry experts, are taking the brunt of international competition now. Hoechst notes, though, that synthetic fibers and plastic films still are showing substantial growth rates.

Hoechst plans to expand its own chlorine capacity and will increase its supplies of ethylene and propylene through a contract with Union Rheinische Braunkohlen Kraftstoff.

Knapsack-Griesheim, a Hoechst subsidiary, will take the olefin output from the Union Kraftstoff cracking unit beginning in 1963 with an initial capacity of 70,000 tons of ethylene a year. The cracker will also produce propylene; and the two olefins will be delivered to Knapsack through a pipeline.

Earlier this year Hoechst negotiated a long-term contract for petrochemical raw materials with Caltex, which was a key factor in causing Caltex to plan a refinery in the Frankfurt area. A substantial part of the refinery output will go to Hoechst.

First-Half Exports Looked Good

If industry estimates of an overall sales gain for the German industry of 4.4 percent for this year—roughly a third of last year—are correct, first half export volume was doing appreciably better with a gain of 7 percent to $810 million, according to the Verbandes der Chemische Industries. This contrasts, however, with a 19 percent gain over 1959 during the first half of 1960.

German companies have been doing particularly well in Latin America where volume in the first half is up 29 percent to $55 million. Overseas sales generally have risen 8.6 percent to $290 million against a gain of 5.7 percent in Europe. Europe, as a whole, accounted for 64.2 percent of the total against 64.8 percent in 1960.

The extremes of current export business for German firms are drugs, up 17 percent in the first half, and nitrogen fertilizers, down by $1 million to around $38.7 million. Price cutting in nitrogen fertilizers and the growth of production in developing countries got the blame for this decrease.

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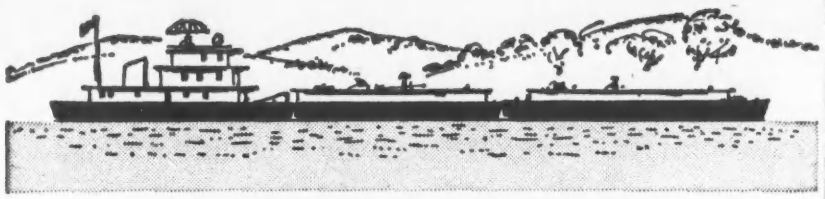

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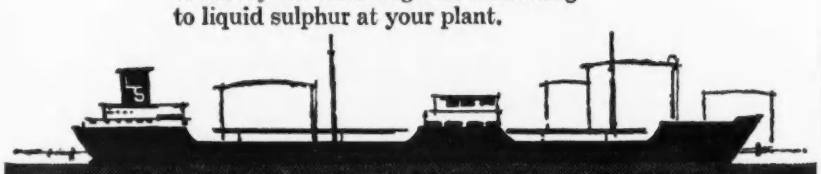

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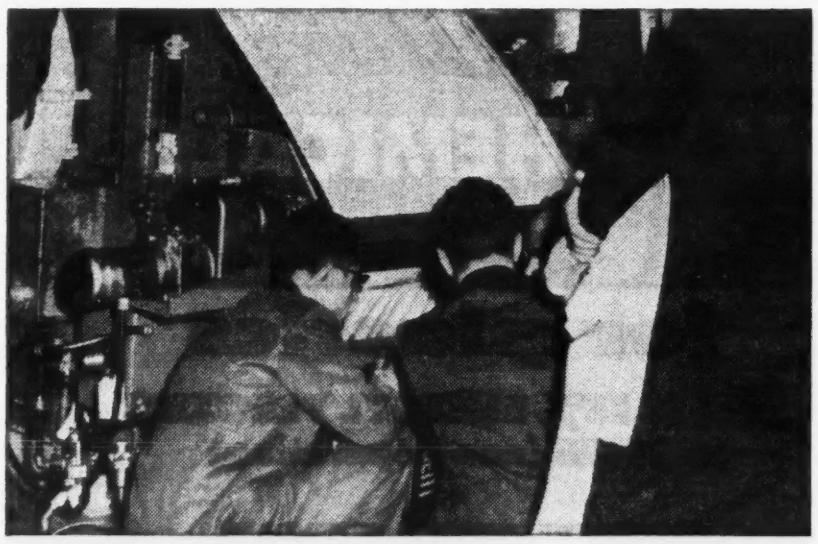

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Ethylene, Propylene Deal Inked by 3 German Concerns

Farbwerke Hoechst AG and its subsidiary Knapsack-Griesheim AG, have just signed an agreement with Union Rheinische Braunkohlen Kraftstoff AG, under which Union Rheinische will build a cracking plant in Wesseling for production of ethylene and propylene.

The new plant is expected to go on stream the end of 1963 and will have an annual capacity of about 70,000 tons of ethylene, most of which Hoechst has agreed to purchase for Knapsack-Griesheim's production of acetaldehyde. Most of the propylene production will also be purchased by Hoechst.

A pipeline for transporting the olefin will be built between Wesseling and Knapsack.

British Enka, Parent Firm, Both Back Courtaulds' Bid

The board of directors of British Enka, Ltd., is strongly, advising the company's stockholders to accept a bid by Sourtaulds, Ltd., to buy up all outstanding shares.

Hurt particularly by the low prices of rayon tire cord, British Enka's sales position worsened notably this year, the board points out. It's felt that "the only solution for this difficulty will be a link with an English company having the necessary facilities for improvement at their disposal."

British Enka is presently part of the group controlled by Algemene Kunstzijde Unie NV, of the Netherlands. The Dutch parent company also is strongly promoting the acquisition.

Silicate Brochures Offered

Philadelphia Quartz Company, Philadelphia, has issued a series of brochures titled "Silicates Service in Depth," celebrating its 130th anniversary. One outlines national delivery services, a second covers economies and improved performance, while a third reviews printed literature on silicates and their applications.

Alco Makes Move

—*Continued from page 5*

Miller, and Lawrence W. Cameron, president, are expected to join Alco's board of directors.

The combined companies, operating out of eleven plant locations, will have an annual sales volume of about $11 million —or double Alco's present volume.

Alco produces rubber and chemical dispersions, synthetic wetting agents and detergents, synthetic thickeners and sizes, rubber chemical accelerators and latex compounds.

In addition, the company recently introduced an elastomeric spray mulch known as "Soil-Set" for both industrial and consumer use.

"Soil Set," the first consumer product to be launched by thirty-three year old Alco, supplies a link with the company's newly-acquired agricultural chemical interests.

Miller and its affiliates turn out and market most major fertilizers, insecticides, fungicides, herbicides and plant growth regulators.

Also, as a formulator, Miller blends and labels pulverized, granular and wettable powders, as well as dust and liquid formulations.

Montecatini Licenses Japs

—*Continued from page 3*

propylene in Italy and markets it there (and in the US through Chemore Corporation) as "Moplen" polypropylene plastic, "Moplefane" polypropylene film, and "Meraklon" polypropylene fiber.

A plant about to go on stream at Neal, W. Va., owned and operated by Novamont Corporation, a wholly-owned Montecatini subsidiary, will soon be producing the company's "isotactic" polypropylene in the US.

RUNNING A PLANT: Philip R. Scarito, appointed works manager for the Flemington, N. J., vinyl polymer plant of Cary Chemicals, Inc., East Brunswick, N. J.

Airco Hydrogen Facility To Rise in SF Bay Area

Air Reduction Pacific Company will soon start construction of a new type of hydrogen production facility at its Richmond, Calif., industrial gas plant.

The $1 million unit will produce ultra-high-purity hydrogen gas. It is expected to be a functioning part of the company's growing industrial gas manufacturing and distribution facilities in the Bay Area by April of 1962.

The plant will use natural gas as a raw material and a purification process that incorporates the properties of palladium, a rare metal, to produce the ultra high purity product.

Foote Mineral Correction

Roland R. Van der Beck has joined Foote Mineral Company as manager of ceramic research. OIL, PAINT & DRUG REPORTER, in its October 16 issue, erroneously reported that he has been appointed manager of Carborundum Company. Mr. Van der Beck was previously with Carborundum.

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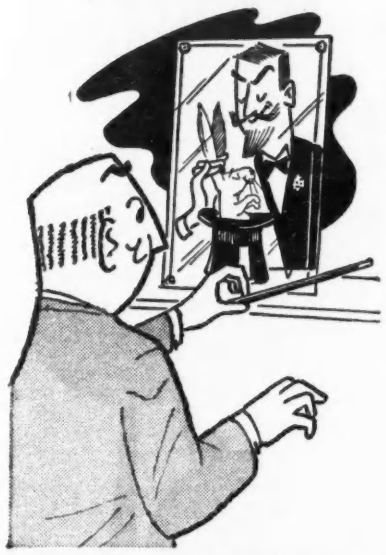

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Saline Water Installation In South Dakota Opened

The nation's second salt water conversion plant opened up for business last week.

Located at Webster, S.D., the facility is expected to produce 250,000 gallons of fresh water daily from the brackish well water of the Webster area via an electrodialysis process.

Department of the Interior figures that the water turned out by this facility will cost something under $1 per thousand gallons.

At dedication ceremonies last Friday (October 20), Interior Secretary Stewart L. Udall pointed out that the average per capita use of water in this country is around 1,500 gallons per day and that this figure is expected to double by 1980.

The nation's first conversion plant—at Freeport, Tex.—uses a distillation process to produce a million gallons of fresh water daily from sea water at a cost of $1 to $1.25 per thousand gallons.

Construction of a third plant, also designed to produce fresh water from the sea at the rate of one million gallons per day, will be completed next month at San Diego, Calif.

Earlier this month Interior asked for construction bids for a one-million-gallon-per-day brackish water conversion plant at Roswell, N.M.

Chemicals in Food

—Continued from page 4

tea, nuts and many fruits; capsicum in peppers; thiourea derivatives in virtually all cole crops; arsenic in shell fish; selenium in many cereals; cobalt in all meats; iron found virtually in all foods, and estrogens found in all meats, and in human tissue also.

Incidentally, several of these carcinogens are essential elements in human nutrition—iron and cobalt for certain, and probably selenium.

The campaign against agricultural chemicals is particularly unfortunate in its timing, Dr. White-Stevens noted, for the world today requires a "food explosion" to match its accelerating population growth.

Such a food explosion, he said, could be accomplished around the world within the next half century "to the immense relief of most of the international tensions which disturb mankind."

He added that the great achievements of American agriculture constitute "perhaps the most resounding victory democracy has won."

"This is a victory we cannot and must not allow to slip away; it is our margin of safety in the modern world; yet this is precisely what can happen," he said.

"If the US farmers stopped using chemicals in food production," Dr. White-Stevens declared, "many crops as we know them today could not be grown at all and the food that was left would increase in price by tenfold—putting it out of reach of all but the very rich."

US Sells 300 Tons of Tin

—Continued from page 5

ers at prices ranging from 17.30 cents per pound to 17.58 cents.

Fifty tons of grade C pig tin were sold to four buyers at prices ranging from 17.11 cents per pound to 18.129 cents.

GSA, meanwhile is inviting sealed bids on about 18,700 long tons of columbium-and-tantalum-bearing tin slags.

The slags, which contain columbian and tantalum pentoxides, were produced in Malaya as a by-product of tin smelting and have been held in the government's stockpile.

Presently stored at Niagara Falls, N.Y., and Welland, Ontario, Canada, the materials are to be sold on an "as is, where is," basis with the purchaser required to outload.

Bids must cover the total tonage at both depots. Some 4,174 tons are at Niagara Falls, and 14,732 tons are at Welland.

Opening of bids is scheduled for 11 a.m., EST April 4 at GSA, Washington.

Citizens Committee

—Continued from page 5

food additives and hazardous articles labeling—have been enacted.

Secretary Ribicoff feels "it is time" for another look at what FDA can do "to assure truly adequate protection" for the nation's consumers.

"We need," he says, "a new evaluation of the amount and kind of protection that is needed, the adequacy of our present resources to provide this protection, the changes that may be needed to get it, and the time it will take to reach the desired objectives."

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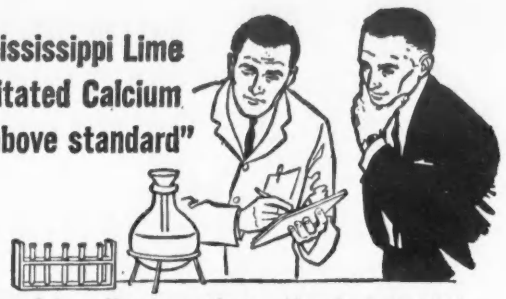

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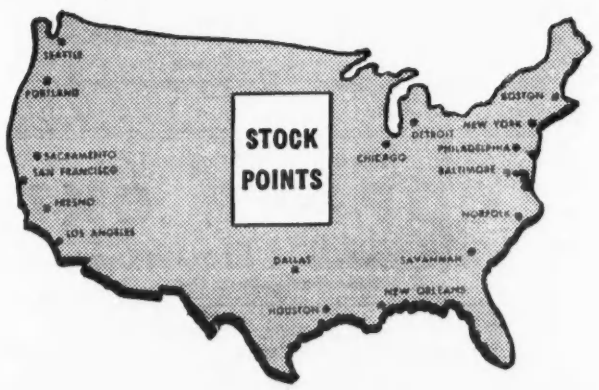

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Obituaries

Dr. David I. Macht

Dr. David I. Macht, a pioneer in the field of pharmacology, died October 14 in Baltimore, Md. He was seventy-nine years old.

Dr. Macht, who was often called on to supply expert testimony by Food & Drug Administration in prosecuting medical quacks, contributed many key discoveries to the field of pharmacology.

Born in Moscow in 1882, he came to Baltimore as a child. He joined the teaching staff of Johns Hopkins University in 1909, remaining active in the field until 1957 when he suffered a stroke while serving as consultant in pharmacology at Sinai hospital.

Among his discoveries was that a drug made from copra venom is useful in treatment of epilepsy and other disorders.

Dr. Floyd Jay Metzger

Dr. Floyd Jay Metzger, a consulting chemical engineer and former vice-president of Air Reduction Company, New York, died October 14 in Stamford, Conn. He was eighty-four years old.

Dr. Metzger served as vice-president in charge of research and development for Air Reduction from 1917 until his retirement in 1947. He then opened his own office in New York as a consultant.

Dr. Joseph A. Talalay

Dr. Joseph A. Talalay, retired rubber technologist who was the inventor of a standard process for latex foam rubber production, died October 15 in New Haven, Conn. He was seventy-nine years old.

Dr. Talalay came to the US in 1940. He later sold his latex foam patents to Dayton Rubber Company and Sponge Rubber Products Company. He held some sixty patents in the general field of latexes.

William V. Garretson, director of the Perth Amboy, N.J., Bureau of Air Pollution Control since its creation in 1957, died October 16 in that city. He was sixty-six years old.

Dr. Jacques P. Gray, director of special medical services for Parke, Davis & Co., since 1947, died October 13 in Detroit, Mich. He was sixty-one years old.

Shulton Sets Acquisition Of Aerosol Corporation

A proposal calling for the acquisition by Shulton, Inc., Clifton, N.J., of all the assets of Aerosol Corporation of America, Wellesley Hills, Mass., in exchange for Shulton stock, has been approved by directors of both companies.

The transaction remains subject to the approval of the stockholders of Aerosol Corporation.

Aerosol Corporation's business will continue to be operated as in the past with no change in management, Shulton says. James R. Barnet, president of Aerosol, will continue in charge of the company's activties.

MCA Joins Chorus

—Continued from page 5

weak patent system, the publication of scientific results in the drug field will of necessity be sharply curtailed."

MCA is also worried about the requirement under the compulsory licensing provision that technical information be handed over to the licensee.

The introduction of a compulsory licensing principle in the US patent system, the association believes, "would be most unwise since it would penalize technical competence and reward indolence."

Dr. Thomas reports that chemical producers are especially distressed by one aspect of the compulsory licensing provision:

"We are particularly disturbed by the adverse effect on American business which will occur if foreign companies can obtain compulsory licenses under US patents and then import the products into our country after manufacture in foreign countries where labor and other costs are far lower than here."

MCA is similarly opposed to the division of patent authority between the Patent Office and the Secretary of Health, Education & Welfare. At the very least, Dr. Thomas says, it will result in "delays and confusion."

All in all, says the MCA spokesman, enactment of section 3 of the bill will produce "difficulties and confusion for the chemical industry." It will have producers asking themselves these questions:

"What will be the effective term of a patent which is granted for a series of chemical compounds if, after the patent issues, someone discovers that one or several of the compounds have a use in prescription drugs?

"Would the claims to compounds to have such use (even though the quantity so used is small) be reduced to a three-year period of exclusivity with the remaining claims continuing to have a seventeen-year term?"

Celanese Chemical Appoints Jonnard as Planning V. P.

Dr. Aimison Jonnard has been appointed vice-president of planning for Celanese Chemical Company. In his new position, Dr. Jonnard will be responsible for the Celanese Corporation of America division's short and long term planning.

Succeeding Robert L. Mitchell, who recently became a vice-president of Celanese International Company, Dr. Jonnard was previously with US Industrial Chemicals Company, a division of National Distillers & Chemical Corporation. His most recent post was that of manager of market research and development for USI.

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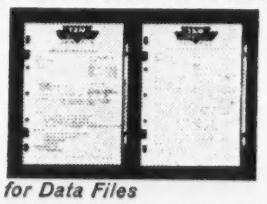

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Petroleum Derivatives

All petroleum derived products, such as solvents, gases and waxes, are holding a steady market, without significant change. Producers' stocks are considered quite comfortable by almost everyone concerned, and these in turn are backed up by a fairly steady consumer demand that can be expected to continue and even pick up slightly as the seasonal increases in the fall market take hold. The price adjustments made in crude oil, which were mentioned in this column last week, have had no noticeable effect on any of the various petroleum derivative fields, nor are they expected to in the immediate future.

The present increases in military expenditures are not making themselves felt in any substantial way, nor are they creating any drastic increase in operating inventories. No build-up in this direction can be reported with the exception of slight augmentation made in line with the normal seasonal spurt, and due to business volume in general picking up right across the board. Prompt shipments can be counted on and, for the most part, the buyers are relying upon this rather than building up their own stockpiles.

The sales of aliphatic solvents to the vegetable oils producers, and to the protective coatings, the dry cleaning and the paint industries are continuing their modest upswing according to expected seasonal demands. Nevertheless, according to producers, no imaginable business increase at present could put a strain on their supplies.

LPG's and LRG's are moving evenly. The onset of cold weather and the increased demand for cold starting gasolines should prove a boon to butane and the like. While it may sag somewhat on the side of supply, the market in general is governed by a very firm price structure.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
104.13	104.13	104.13	103.74

For Current Prices See Page 9

Aromatic Solvents

Benzene—Ample supplies are everywhere in evidence. High quality benzene is being shipped promptly to meet all present demands.

This holds true to such an extent that the balance between supply and demand can be stated as clearly one-sided, what with the market resting comfortably on the more than sufficiently available supplies. Despite the fact that business volume is on its seasonal increase and benzene-derived chemical products have been picking up in sales right across the board, the majority of sources feel that benzene capacity is such that it will enable them to deal with any and all demands that might be put upon them in the near future.

The manufacture of hard goods is steadily increasing, the outlook for plastics is good, and a sharp swing upward in military expenditures is noticeable. All these are positive factors for the benzene industry since all of them will utilize products derived from benzene intermediates.

In spite of this upswing both at present and in the immediate future, buyers feel no shortage is likely to develop. They remain relatively sure they will be able to count on suppliers' stockpiles and will not have to build up any of their own; any more, that is, than a larger volume operating situation in their own physical plants might necessitate.

The 31 cent per gallon price for tankcar quantities remains steady, without change. No difficulty has been encountered in contracting long term supplies at this 31 cent per gallon rate, as long as the contract stipulates a protection clause for the buyer, covering him in the event that prices decline.

Pure Aromatics—These solvents which differ in boiling ranges and evaporation rates, but all of which contain at least 95 percent aromatic constituents, are being employed to a great extent in industrial finishes where the demand is for a high solvency, but where an evaporation rate different from toluene or xylene is required. Supplies are everywhere sufficient. The price range of 29 to 30 cents per gallon, depending on the product, is without change.

Toluene—Inasmuch as large stocks of this material are kept from building up by the producers' conversion of any excess into gasoline to step up the octane rating, the supply situation of toluene can clearly be seen as quite steady. The demands of gasoline octane ratings are such that a considerable amount of aromatics which are fractionated into toluene is being bought and used for purposes of gasoline enrichment.

Although the official list price remains at 25½ cents delivered, one source reveals that toluene is moving in certain localized areas at 25 cents. One of the areas in which this is the case is Newark, N.J., perhaps the largest toluene-consuming region in the country.

While this may suggest future developments, it does not indicate a general break-through in the market at present. The prevalent price pattern remains firmly at 25½ cents.

Miscellaneous

Mineral Oils—White oil demand is routine and running just about as it had been. Special lubricant uses were steady at good volume. Pharmaceutical demand is currently slow, but some upward direction in buying interest is beginning to be noted during October, and better business volume is expected for the balance of the year. Price patterns in effect over recent months are expected to hold for the balance of the year.

Petrolatums — The market on various grades of petrolatums is described as steady at fairly good business volume. Buying interest in the very light color grades for ointment bases is on the upgrade seasonally. Prices in effect over recent months hold firm, and present schedules are likely to remain unchanged for the balance of the year.

Waxes

Microcrystalline Wax — The food container industry continues to take heavy shipments of the light grades of laminating and coating microcrystalline waxes.

Petroleum Briefs

RUSSIAN TANKER FLEET: The Soviet Union is making determined efforts to capture a larger share of world oil trade, according to data just compiled by the Bureau of Mines, Department of the Interior, on the growth characteristics of the U.S.S.R. tanker fleet.

In a speech prepared for presentation at the Annual Quartermaster Association Convention, Atlanta, Ga., on October 13, Donald Frendzel of the Bureau's Division of Foreign Activities states that in the past 10 years the U.S.S.R., which is now the world's second largest crude-oil producer, has increased its tanker fleet by 108 vessels, representing 90 percent of its present total tonnage, and plans a further substantial expansion by 1965.

Frendzel said that even with its emphasis on tankers, Russia today has only 2 percent of the carrying capacity of the world tanker fleet. It is, however, expecting to purchase from the Free World a large number of tankers in coming years and to continue to charter tankers wherever possible so that Soviet oil can be moved to market.

Crude Oil Stocks Drop

Domestic and foreign crude petroleum stocks at the close of the week ended October 7 were 2,025,000 bbls. lower than at the end of the preceding week.

Week ended October 7—249,957,000 bbls.

Preceding week—251,982,000 bbls.

This increase comprises an increase of 168,000 bbls. in stocks of domestic crude, and a decrease of 2,193,000 bbls. of foreign crude.

(Source: Bureau of Mines)

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Aliphatic Organics

Carbon Bisulfide Production Rises As Rayon Staple Makes Big Gain

Although carbon disulfide has been considered a "loser," indications are today that the pessimists have overstated their case by placing undue emphasis on the chemical's dependence on the tire cord market. In fact, an uptrend in CS_2 sales is in progress and with usage of rayon staple in blended fibers for clothing, furniture fabric and carpet increasing, cautious optimism is clearly warranted. Through August of this year, CS_2 production—a reliable guide to market conditions—averaged 44 million pounds a month, and at this rate, 1961 output will exceed the 522 million turned out in 1960 and the 523 million of 1957.

For comparative purposes, the intervening years can be overlooked as not being part of any trend. All segments of industry—and especially textiles—fared exceptionally well in 1959, and in the preceding year, when CS_2 output was a mere 468 million pounds, sales generally were shackled by the recession.

Factors Supporting the Uptrend

Several factors are supporting the CS_2 market currently. Relatively larger quantities, for example, are being utilized in the manufacture of cellophane, cellulose sponges, rubber accelerators, ore-flotation agents, and sausage casing.

But the single most important end-use is rayon staple. Here is where the boom is. For the first eight months of '61, according to textile industry sources, shipments of rayon staple (for spinning and blending) were 249 million pounds, 21 percent higher than in the comparable period of '60.

Accounting for the surge: heavy promotion and increasing acceptance of rayon-blended fibers in all major markets; less foreign competition. Imports of carpet stable, for example, were 672,000 pounds in the first half of the year, as opposed to 6 million in all of '60 and 24 million in all of '59.

Total imports of rayon staple are also decreasing; about 59 million pounds were brought in last year as against 115 million in '59. What is apparent is that domestic rayon manufacturers have gotten prices down so low that importers are unwilling to compete.

Long-Term Outlook Uncertain

Although shipments or rayon staple for spinning and blending will likely top the 314 million pounds of '60 and the 348 million of '58, the long-term outlook is not yet clear. Optimism is particularly high, however, and, according to sources in the textile field, rayon blends and particularly such new high-strength fibers as "Avril" are causing a lot of excitement.

What about tire cord? There's some indication that the downtrend in rayon usage is losing momentum. In the first half of '61, shipments of rayon for this purpose totaled 104 million pounds. This compares with 248 million in all of '60 and 311 million in '59. Conceivably, then, this year's dropoff could be about 40 million pounds as opposed to 63 million last.

The gap could be even narrower if production of rayon cord tires is appreciably larger in the late summer and fall months. This is suspected as rayon tires dominate the original equipment market, and Detroit's demands should thus be higher in that period.

In addition, the initial impact of nylon tires may be wearing off and the switch-over from four-ply to two-ply cord tires on the increasingly popular compact cars may bolster rayon's position in the market.

Certainly, rayon producers are in a good position to compete with newer competition in practically all areas. Carbon disulfide was reduced about one-half cent a pound last year and a major manufacturer by constructing new facilities so as to save on manufacturing costs, guarantees them a continual raw material source at stable prices.

Carbon Tetrachloride — From 426,380 pounds in July, imports of carbon tetrachloride rose to 1,411,698 pounds in August. This was equivalent to about 35 percent of total 1960 imports of 4 million pounds.

The entire shipment was valued at $88,879 and dutied at $12,025, according to the Foreign Trade & Economics Operations division, Bureau of Census, US Department of Commerce.

Top spot on the suppliers' roster was held by Belgium, which accounted for 929,041 pounds, valued at $53,098 and dutied at $7,897. Canada was in second place, shipping 437,160 pounds, valued at $33,344 and dutied at $3,715.

Ethyl Alcohol—International trade in ethyl alcohol has returned to normal. In August, for the third month in a row, there were no imports; nor were there withdrawals from bonded warehouses, as happened in July (900,000 gallons).

August exports, at 1,763 gallons, represented usual volume. In fact, the only month so far this year when the picture was awry was June when some 5.7 million gallons of ethanol were shipped to West Germany from Philadelphia.

Glycerine—Prices for crude glycerine have weakened, one factor in the decline being the limited amount of trading. Saponification is said to be available at 13c. to 13¼c. a pound, soaplye at 12c. a pound.

Imported crude is said to be going at 12c. to 12¼c. a pound, c.i.f.

In August, inshipments of crude glycerine amounted to 1,568,129 pounds, valued at $200,527 and dutied at $3,854. Suppliers were: Indonesia, 112,593 pounds, valued at $11,584 and dutied at $450; and the Philippine Republic, 1,455,536 pounds, valued at $188,943 and dutied at $3,404.

Methylene Chloride—Although chemical producers are finding it extremely difficult to boost prices due to the severity of competition, some sources feel that

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
130.02	130.02	130.02	130.75

For Current Prices See Page 9

Aliphatics Foreign Trade: August

Imports of selected industrial aliphatic organics for July and August, 1961, as reported by the Bureau of Census, were as follows:

		August	*July*
Acetic acid (over 65 percent)	lbs.	322,980	907,960
Acetic anhydride	lbs.	144,950	6,650
Amyl hexyl propyl alcohol and fusel oil	lbs.	33,000	0
Carbon tetrachloride	lbs.	1,411,698	426,380
Chloroacetic acid and anhydride	lbs.	248,460	672,800
Ethyl alcohol	gals.	0	900,000
Formic acid and anhydride	lbs.	167,156	181,911
Furfural	lbs.	0	1,781,000
Glycerine, crude	lbs.	1,568,129	3,073,823
Refined	lbs.	58,240	0
Lactic acid (55 percent or more by weight)	lbs.	156,739	61,404
Perchloroethylene	lbs.	2,344,382	2,060,616
Tetrachloroethane	lbs.	0	0
Trichloroethylene	lbs.	2,344,260	3,291,978
Vinyl acetate unpolymerized	lbs.	3,117,541	3,862,666

a methylene chloride increase is a likely January 1 development.

An attempt to establish a higher schedule was made in mid-October failed, they say, because it was announced too late to give competitors a chance to consider the situation and inform their customers, in the event they decided to follow along.

Molasses—World trade in molasses reached a new high in calendar year 1960, Foreign Agricultural Service reports. Estimated total molasses imports of the 25 countries for which import data are available were 722 million gallons. This is more than 75 percent above the low imports of approximately 400 million gallons in 1957 and well above the 510 million of 1959.

Major molasses importers last year, FAS says, were, in million gallons: United States 449; United Kingdom 81; Japan 64, and Canada 22.

Major exporters in 1960, were, in million gallons: Cuba 256; Mexico 82; Dominican Republic 66; Philippine Republic 66; Malaya 28, and Jamaica 26.

Perchloroethylene — Imports of perchloroethylene rose from 2,060,616 pounds in July to 2,344,382 pounds in August. The increase was seasonal and in advance of the customary upturn in fall requirements for this most widely-used dry cleaning solvent.

The August shipment, according to statistics issued last week by the Commerce department, carried a total value of $184,003 and a duty of $11,042.

Supply sources were: France, 982,137 pounds, valued at $76,171 and dutied at $4.571; the Netherlands, 752,725 pounds, valued at $53,193 and dutied at $3.192; Canada, 505,520 pounds, valued at $47,663 and dutied at $2,860; and Japan, 105,000 pounds, valued at $6,976 and dutied at $419.

Perchlor prices are unchanged and an increase, at least, is impossible before the beginning of '62. Equally unlikely at the moment is a price decline, despite the fact the competition is known to be tough and the possibility that aggressive marketing may lead in some areas of the market to price fluctuations.

Sucrose—Refined white sucrose has been cut 10c., to $9.15 per cwt., in bags, f.o.b. refinery, in the Northeast. Keen competition, noted in this market for the past several months, reportedly forced the announcement of the lower price, which was effective with the opening of business on October 10.

Trichloroethylene — Imports of trichloroethylene in August totaled 2,344,260 pounds, and according to Commerce department reckoning, were valued at $151,040 and dutied at $11.329.

Major shippers was the United Kingdom, accounting for 1,908,900 pounds, valued at $119,033 and dutied at $8,929. Also on the suppliers' roster: France, 303.626 pounds, valued at $22,131 and dutied at $1,660; Italy, 78,534 pounds, valued at $4,826 and dutied at $321; and Canada, 53,200 pounds, valued at $5,590 and dutied at $419.

For the first eight months of this year, imports totaled 23,761,096 pounds, according to Commerce department statistics. This compares with 59,088,069 pounds in all of 1960.

The gap will probably be narrowed if not completely closed by year's end, however. Imports in the fall months will likely be appreciably higher than those of last winter when inshipments lagged, presumably as a result of recession-harnessed demand for the solvent in major industries.

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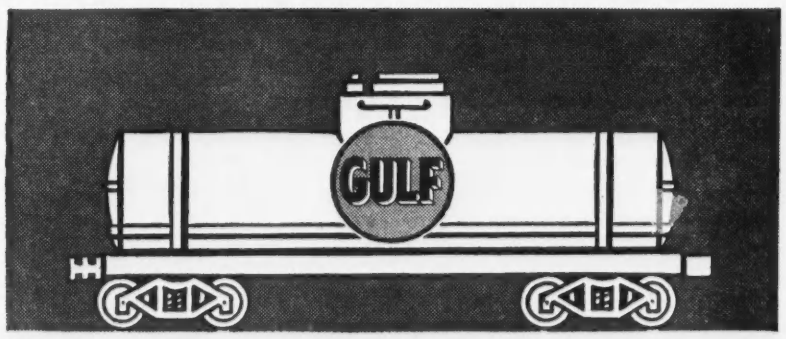

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Agricultural Chemicals

DDT price is now 17 cents a pound in carlot shipments, delivered. Made in piecemeal fashion, the cut was first initiated a week ago Friday by a single supplier and was followed last week by other major producers who moved quickly to become competitive as they learned of the news. While listed at 21 cents a pound for some time now, DDT in reality has been moving at 19 cents a pound of late, according to some trade sources, so that the new 17 cent price does not represent as large a cut as indicated at first glance. Still any downward movement of price is not welcome and producers are not happy with the lower listing according to trade observers.

Most producers believe the 17 cent price is at best an off-season price which will move upward again as demand picks up. An important factor in determining the duration of the new price is the upcoming tender of bids for export DDT by the government.

Trade sources reveal that approximately 70 million pounds of DDT will be sought for overseas shipment beginning in November.

Such volume will have the effect of draining producers' stocks over the winter months thus tightening the domestic market right before late first quarter 1962.

Opinion in the trade is that DDT prices will then move up again, but to what heights is still a matter of conjecture.

Price Trends

Advanced
None

Reduced
DDT, flake or lump, 4c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
111.58	111.58	110.18	111.27

For Current Prices See Page 9

Animal and Plant Foods

Ammonium Sulfate—The US importer of the Italian ammonium sulfate mentioned in this column last week reports that the granular material is being well received by domestic customers, and that should interest be sustained more ammonium sulfate will be imported.

The Italian material compares in quality with domestic ammonium sulfate, according to the US company. Although reported in this space last week as being sold at below US prices, the importing company has revealed that the Italian ammonium sulfate is available at the same listing as domestic material.

Potassium Muriate—Up 1c. per unit of K_2O will go standard potassium muriate, carlots, works, on November 1 for the November through January period. New price will be 37c. per unit.

Granular material, carlots, works, is also slated for a 1c. hike, raising its price on November 1 to 40c. per unit of K_2O.

Potassium muriate, granular, carlots, works, in 100-lb. bags, 60 percent minimum K_2O will go up 60c. per ton on November 1 to a level of $29.

Standard material in bags, same basis, will also rise 60c. per ton on November 1 to the level of $27.20.

Superphosphate—US production of superphosphate and other phosphatic materials during August amounted to 184,804 short tons (100% P_2O_5), compared with output in August of last year of 189,745 short tons.

Shipments of superphosphate fertilizer materials during August totaled 137,046 short tons, or eight percent below the volume shipped during the corresponding month of last year.

Tankage—New York price of dry rendered tankage, 45 to 50 percent protein, is listed at $1.05 per unit, f.o.b., sellers' plants, but sources in the city reveal it is well-nigh impossible to buy material at that posting.

Volume material is moving to the Midwest, South and north to Buffalo at $1.10 per unit creating a tight supply situation locally.

With the soybean meal market steadily rising, favor is being shown to tankage on the basis of price. An easing of the soybean meal market, which may occur due to the large crop, will have the effect of easing back the tankage listings.

Pesticides

After a lapse of over ten years, USDA is calling a public hearing on proposals to quarantine ten additional states against the Japanese beetle, and to add three states to the white-fringed beetle quarantine.

To be held at the Peabody hotel, Memphis, Tenn. on December 5, the hearings will discuss proposals to extend the Japanese beetle quarantine to California, Georgia, Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, South Carolina and Tennessee.

On the following day the matter of quarantining Arkansas, Kentucky and Virginia will be discussed because of the infestation of white-fringed beetles in those states.

Interested persons may testify at either of these hearings, or may submit statements to: Director of the Plant Pest Control Division, Agricultural Research Service, USDA, Washington 25, D.C., on or before the date of the hearings.

Agricultural Chemical Briefs

PESTICIDE TOLERANCE SOUGHT: California Chemical Company's Ortho Division, Richmond, Calif., has filed a petition with Food & Drug Administration proposing the establishment of a tolerance of fifty parts per million for residues of N-trichloromethylthiophthalimide in or on the following crops:

Apples, avocadoes, blackberries, blueberries, boysenberries, cantaloups, celery, cherries, citrus fruits, crabapples, cranberries, cucumbers, currants, dewberries, endive (escarole), garlic, gooseberries, grapefruit, grapes, honeydew melons, huckleberries, lecks, lemons, lettuce, limes, loganberries, muskmelons, onions, oranges, pumpkins, raspberries, shallots, tangerines, tomatoes, watermelons and winter squash.

Farm Chemical Imports: August

Following are data compiled by the Bureau of Census indicating volume of imports of agricultural chemicals for August and for the same month last year. Figures for ammonium phosphates and fishmeal and scrap account only for that material intended for use as fertilizer. All figures are in short tons.

	August 1961	*August* 1960
Ammonium nitrate (over 32 percent N)	14,388	13,453
Ammonium nitrate (32 percent N or less)	.....	84
Ammonium phosphate	10,932	8,599
Ammonium sulfate	9,163	11,690
Calcium cyanamide	5,160	8,745
Castor bean pomace	881	2,148
Dried blood	561	222
Fishmeal and scrap	4	2,183
Guano	[1]	1,752
Nitrogen solutions	6,024	4,692
Peatmoss (fert. grade)	19,162	22,770
Phosphates, crude[2]	10,132	16,622
Potassium chloride, crude	16,168	3,499
Potassium nitrate, crude	10	10
Potassium sulfate, crude	2,694	1,158
Sodium nitrate, crude and refined	37,004	16,312
Urea	7,214	4,310

[1] Not reported.
[2] Including apatite and phosphate rock.

Colloidal Silica Growth Rate Up On Strength of Broader End-Use

A broadening end-use pattern for finely divided silica has helped boost chemical manufacturers' sales of products based on this material to a volume currently estimated at more than 20 million pounds annually. And although the material is inert, its producers aren't. They are busy supplying the specialty products, technical service, and research and development programs which chemical men believe will open up a variety of future applications for colloidal silicas in all areas where its properties as a thixotropic, reinforcing, suspending or flatting agent can be fully utilized.

Cabot Corporation, Boston, Mass., gave potential users a comprehensive run-down on the field in general and the company's "Cab-O-Sil" pyrogenic silica in particular at a seminar on colloidal silicas held at the Roosevelt hotel in New York last fortnight.

Kenneth A. Loftman, heading Cabot's Minerals & Chemicals Division Research Center at Billerica, Mass., covered the principal types, applications, and properties of colloidal silicas being marketed by major producers in this country.

As one means of classifying these materials, Mr. Loftman breaks them down as to the basic method of manufacture; that is, liquid or vapor phase. In the usual liquid process sodium silicate is reacted with sulfuric acid to give a soluble sodium salt, water and silica gel.

Cabot Uses Vapor Phase

In the vapor phase process, utilized by Cabot, essentially pure silicon tetrachloride is vaporized and transported to a furnace in which a hydrogen flame burns. The water vapor produced on combustion reacts with the silicon tetrachloride to produce silicon dioxide and hydrogen chloride.

The absorbed hydrogen chloride is driven off by heat and steam in a calciner, after which the silica is blown into storage hoppers from which it is bagged for shipping.

Vapor phase silica was first produced in Europe by the German firm, Degussa, whose product was called "Aerosil." The "Cab-O-Sil" of Cabot Corporation is described as a submicroscopic particulate silica prepared in a gaseous environment at about 1,100 degrees C. by vapor phase hydrolysis of a silicon compound.

The company points out that this results in a product which is different from silica gels, silica aerogels and other precipitated silicas. On a moisture-free basis it is said to be 99.9 percent silicon dioxide with particle sizes ranging from 0.015 to 0.020 microns.

Mr. Loftman points out that since "Cab-O-Sil" is neither a gelatinous nor a porous silica, it has no internal surface areas, whereas this usually constitutes over 90 percent of the total surface area of silica gels and silica aerogels. The enormous external surface area is highly reactive physically and accounts for many of the unusual properties of the product, he concludes.

Producers of Finely Divided Silica

Other major producers of finely divided silica include Davison Chemical Division of W. R. Grace & Company with "Syloids" (hydrogel), Monsanto Chemical Company, manufacturer of "Santocel" (aerogel), and E. I. duPont de Nemours & Co., "Ludox" (hydrosol). Columbia Southern Chemical Division of Pittsburgh Plate Glass Company produces particulate silica under the "Hi-Sil" tradename.

DuPont recently introduced an alumina-modified silica sol called "Ludox AM" which is reported stable over a pH range of two through ten. Sources point out that at usual concentrations, silica so's are generally unstable in the range from four to seven.

In "Ludox AM" aluminum is said to replace some of the silicon atoms in the outer surface of the molecule and the product is reported to contain roughly 0.2 percent aluminum as Al_2O_3 in the sol. It is being offered as a liquid dispersion (30 percent silicon solids).

Sodium chloride or multivalent salts are reported to have little effect on "Ludox AM" and thus buffering or adjustment of salt concentration is not necessary to keep the collodial silica in a liquid dispersion.

Silica gel has long been known as a good dehydrating agent and, as such, finds numerous applications in industrial processing. Last week Davison Chemical released data on design and performance of what is believed to be the world's largest air dryer employing silica gel as a desiccant.

The data was issued with permission of Air Force Systems Command & Aro, Inc., contract operator of the US Air Force's Arnold Engineering Development Center, Tullahoma, Okla.

Two huge wind tunnels at the center require dry air in order to simulate high altitude conditions in testing top priority missiles, aircraft and space exploratory vehicles. Speeds of 700 to 3,500 miles per hour, and altitudes up to 200,000 feet can be simulated.

Zero Moisture Needed

Air passing through the tunnels at high speeds must in some cases be dried to almost zero moisture. This simulates conditions at altitudes to nearly thirty-eight miles, beyond which aerodynamic considerations cease to be a factor.

Under maximum conditions of relative humidity and air flow, the dryer may remove as much as 690 pounds of water per minute, the company says.

The unit was intended for operation with pre-cooled inlet air, but cost estimates called for elimination of the refrigeration equipment required for precooling. This, of couse, increased the severity of inlet conditions for the desiccant.

Davison Chemical reports the beds can accumulate more than 58,000 pounds of water while maintaining minimum moisture conditions (exit dew point of minus twenty degrees F.) for a period of one and one-half to sixteen hours depending on conditions.

The gel can be reactivated by passing heated air, counter current, through the beds, an operation which takes about eight hours, during which time the entire charge of silica attains a temperature of over 300 degrees F.

Silica gel can be further refined to yield hydrogels or aerogels. If the gel is crushed, washed free of reaction salts, dried and ground to small particle size a hydrogel is formed.

Manufacture of Aerogels

Aerogels are manufactured by removing water from the pores of the hydrogel and substituting air. This is done by washing with alcohol and processing under controlled conditions of temperature and pressure.

A hydrosol (30 percent silicone solids in a dispersion) is basically a diluted gel. Still another form of silica, a semi-solid, elastomeric precipitate is obtained in the presence of certain nuclei if temperature, rate of mixing and concentration of components are varied.

A number of industrial applications for finely divided silica call for its use in the form of an aqueous dispersion. These silica sols, containing 15 to 30 percent silica and 70 to 85 percent water by

—Continued on page 68

USAF Requires Dry Air: Davison Has the Answer

Davison Chemical Division of W. R. Grace & Co. is supplying silica gel for what is said to be the largest single application ever developed for this material as a desiccant.

Dry air requirements of two huge Air Force wind tunnels at the Arnold Engineering Development Center, Tullahoma, Okla., are met by using 1,224,000 pounds of "Davison 6X" course granule silica gel in two beds, each about sixty feet square and three feet four inches deep.

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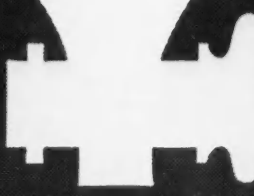

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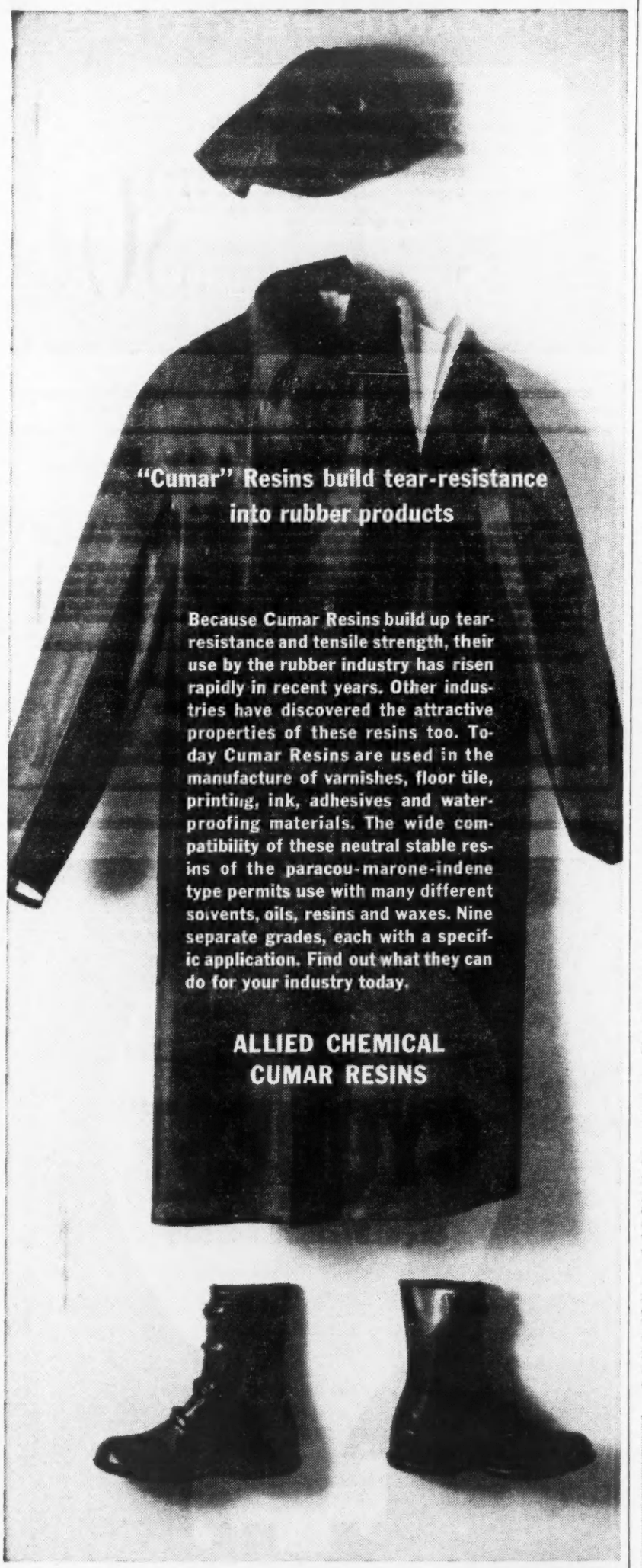
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Coal Chemicals

Pyridine Short Supply Continues, Demand Expanding at Moderate Rate

Still afflicting the US and world markets, the shortage of refined 2° pyridine is now three years old. Expected to continue into 1962, the tight supply situation may nevertheless show signs of relief next year, according to trade sources. Expansion of pyridine facilities abroad will add to market supply reversing in part the trend which in recent years saw three US producers give up pyridine production entirely. Pyridine demand over the next five years is expected to display a moderate growth rate as new applications are uncovered for this versatile chemical. Immediate prospects for growth are already apparent in polycarbonate resins and in fungicides.

The current supply situation is termed extremely tight. Domestic producers are turning out as much pyridine as possible from available crudes but volume is still not enough to meet needs. Allocation seems the rule rather than the exception. Two producers remark that they are booked ahead solid for the balance of the year.

Output On the Rise

Pyridine production has been rising steadily since 1958, considered by trade sources to be the last normal year. In 1958 output was 1.6 million pounds; in 1959—2 million pounds; in 1960—2.5 million pounds, and in the first seven months of 1961 production was 1.6 million pounds (as against 1.5 million pounds in the comparable period last year).

These domestic production figures from the Tariff Commission must be used as a guide only, however, for undoubtedly some of the imported crude bases, chiefly from the USSR, have been upgraded to meet pyridine specifications and are included as domestic production although originating outside of the country.

Then, too, at least 128,000 pounds of refined material was exported last year, taking away from domestic supply.

What's hindered domestic production from advancing even more rapidly in recent years has been the reduced volume of crude bases, due partially to the reduced steel activity during the prolonged strike of '59-'60, and the fact that three domestic producers have given up on pyridine in recent years, based in part on the high maintenance cost of pyridine facilities.

Demand is Strong

Pyridine demand continues strong in its traditional routes into pharmaceuticals, textile waterproofing, as an intermediate, rubber accelerators, insecticides and host of other applications.

Demand expansion is right now pinned on polycarbonate resins and fungicides. The production process for polycarbonate resins, a thermoplastic material, employs pyridine with its high-recovery value as an acid acceptor. As polycarbonate resins expand, two plants are on stream now with two more in pilot stage, pyridine volume will rise.

In fungidices, a major chemical producer in Great Britain is selling a new fungicide employing pyridine in the production process. Pyridine suppliers in UK are stepping up output for this added use. In the US pyridine producers report inquiries for material from agricultural sources for new applications but the actual end use remains sketchy.

Pyridine's price pattern has remained rather stable since the introduction of synthetic pyridine in 1954. Coaltar producers in some instances are not happy with the current price of 75½c. a pound in drums, carlot quantities. Due to the strong demand and scarce supply, some producers feel the pyridine price is not realistic and should be posted higher.

Yet to other producers the current price is regarded as realistic in that it is conductive to making pyridine attractive to consumers for use as a solvent or for synthesis. In the event of a higher price, the same consumers might turn to substitutes, one opinion has it.

Looking ahead to next year trade sources see pyridine prospects tied to a number of factors.

Coaltar production of pyridine will still be harnessed to steel output, and right now only a moderate rise in steel demand can be expected.

Synthetic pyridine output in 1962 is going to depend in large part on demand for nylon tire cord. The sole synthetic pyridine producer has a virtual stranglehold on 2-vinylpyridine production (ex a-picoline) and should nylon tire cord demand take off into higher ground, it's believed the producer will concentrate his efforts on a-picoline at the expense of pyridine.

Only abroad is pyridine supply expected to rise significantly. A UK producer is in the midst of boosting pyridine output to about 600 tons a year. How much of this material will reach the US market depends on the demands of the new fungicide product now being produced in UK.

Clouded as the picture appears, producers are confident that pyridine will continue to gain ground in the Sixties. After all, they point out, pyridine has shown a remarkable resiliency in bouncing back after old end-uses have been knocked out, a case in point being the switch in niacin production from pyridine to 2-methyl, 5 ethylpyridine.

As 1962 approaches the consensus holds that supply will be short but not drastically so, and that demand will advance beyond current levels.

Price Trends

Advanced

Blue 2B, extra conc., 11c. a lb.
Gray L, 11c. a lb

Reduced

Phthalic anhydride,* 2½c. per lb.
* (One company)

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
119.86	119.86	119.85	118.34

For Current Prices See Page 9

Basic Products

Steel production declined for the second week in a row with production for the week ended October 14 showing a 1.5 percent drop from the preceding week's output.

Production for the week was 2,071,000 net tons according to AI&SI, as against

Aromatic Chemicals Foreign Trade: August

Following statistics are compiled from Census Bureau reports.

		August 1961	*August* 1960	*First Eight Months* 1961	*First Eight Months* 1960
EXPORTS					
Benzene	gals.	6,272,459	540,526	29,952,265	15,396,769
Coaltar, crude and refined	gals.	86,165	29,307	276,247	103,227
Creosote or dead oil	gals.	—	45,316	69,782	80,875
Cresols and cresylic acids	lbs.	2,053,735	1,344,259	16,675,109	8,908,201
Phenol	lbs.	3,364,242	7,768,785	21,961,063	31,594,315
Phthalic anhydride	lbs.	742,526	1,397,065	15,796,971	13,183,955
Styrene monomer	lbs.	12,119,174	6,187,700	90,062,627	85,907,347
Toluene	gals.	3,169,616	792,649	27,146,268	37,627,773
IMPORTS					
Benzene	gals.	—	3,167,649	9,251,162	25,515,606
Creosote and dead oil	gals.	4,701,451	2,020,039	25,835,615	24,614,257
Cresols and cresylic acid, ADF	gals.	35,115	109,731	492,169	888,878
Naphthalene, melting point less than 79° C.	lbs.	7,600,621	4,481,539	77,547,646	27,706,105

Coal Chemicals

2,102,000 net tons in the preceding week.

Output of steel for the year through October 14 was a flat 10 percent behind production achieved in the comparable 41 week period of last year.

Benzene — Reported freely available, benzene demand is being met promptly by shipments of material at 31c. a gallon, unchanged from the price schedule established last Summer.

No benzene imports were recorded in August making two months in a row that no shipments were noted.

Total imports for the first eight months of the year stood at 9,251,162 gallons as against 25,515,606 for the same period last year.

Naphthalene — Still generally tight, naphthalene supply situation is unchanged from previous reports.

Consumers are looking to next year when a host of petronaphthalene units are slated to come on stream.

In all, some 625 million pounds of added capacity from petroleum are due within the next year or so, although only one unit is now producing.

Naphthalene imports in August amounted to 7,600,621 pounds valued at $674,321, down approximately 1.1 million pounds from July.

Major shipments were received from:

W. Germany—3,102,809 pounds valued at $262,925 arrived at New York, Philadelphia and Boston. Average price per pound—8.5c.

UK—1,446,768 pounds valued at $107,288 arrived at New York and Boston. Average price per pound—7.6c.

Netherlands—1,097,094 pounds valued at $139,477 arrived at New York and Boston. Average price per pound—12.7c.

Poland—881,840 pounds valued at $62,443 arrived at Boston. Average price per pound—7.1c.

Belgium—571,082 pounds valued at $58,632 arrived at New York and Philadelphia. Average price per pound—10.3c.

Hungary—216,877 pounds valued at $19,411 arrived at Boston. Average price per pound—8.9c.

Italy—209,653 pounds valued at $18,768 arrived at New York. Average price per pound—8.9c.

g-Picoline—Tightly supplied until a month ago, g-picoline is reported now moving freely from producer to customer. Orders are being taken with reasonable assurance of prompt volume delivery.

Toluene—Localized weakness in coaltar toluene price is reported. Moving under pressure in Newark and some other volume consuming areas, price is indicated to be 25c., delivered. Situation is reported confined, and as yet there is no evidence that a general price drop is contemplated.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended October 14, were as follows:

Ammonia liquor	lbs.	618,701
Ammonium sulfate	lbs.	25,826,742
Benzene	gals.	2,836,703
Coaltar	gals.	14,311,926
Crude chemical oil	gals.	360,336
Solvent naphtha	gals.	95,200
Toluene	gals.	629,578
Xylene	gals.	175,106

Dyes

Only two price change in coaltar dyes have been noted for the fourth quarter:

Blue 2B, extra conc.—From a level of $1.51, this dye, (C. I. 22610), has been raised 11c. to the level of $1.62 per pound.

Gray L—A hike of 11c. per pound has been made in this dye (C.I. 27720), now making its listing $2.29 per pound.

Intermediates

p-Nitrobenzoic Acid—Current price of this intermediate is listed at 53c. per pound in carloads or truckloads, and 54c. per pound in lesser amounts, f.o.b., plant.

Phthalic Anhydride — Late Friday a major producer cut phthalic anhydride prices 2½c. per pound across the board making the new tankcar price 15c. per pound. The move was based, the company said, on an expected reduction in naphthalene price.

Phthalic anhydride imports amounted to 551,139 pounds in August, valued at $110,228, and were only 231 pounds short of July's import volume.

Shipments originated in:

Switzerland—330,690 pounds valued at $66,138 arrived at Boston. Average price per pound—20c.

Belgium 220,449 pounds valued at $44,090 arrived at Boston. Average price per pound—20c.

Aqua-Chem Is Expanding Its Water Treatment Goals

Aqua-Chem, Inc., Waukesha, Wis., has set its sights on expansion into the entire field of water treatment—conversion of salt and brackish water, correction of pollution, and conservation of existing water supplies.

It also foresees sales by 1965 of more than $15 million—more than six times the present volume—with earnings of more than $1 million.

Aqua-Chem's plans and expectations for the future were outlined last week by Fred A. Loebel, president, in an address to the Milwaukee Investment Analysts Society.

Aqua-Chem, an affiliate of Cleaver-Brooks Company, had its first public stock offering last May.

Mr. Loebel told the analysts that his firm has been a pioneer in the development of equipment for fresh water conversion of sea water and brackish water since the early days of World War II.

Drug Wage Rate

—Continued from page 3

plants covered by the survey, Mr. Brandwein argued that employment is a better basis for a wage determination than a plant count, since the former is closely related to output and sales.

Pointing out that the March survey was more than six months old and that both the ICWU and OCAW have negotiated wage increases since that time, the union spokesman urged that Labor Secretary Arthur Goldberg, who will make the final determination, should take these factors into account.

He, therefore, maintained that an allowance of 4 cents an hour be added to the $1.69, making the minmum $1.73 an hour. He arrived at the 4-cent figure by using data offered as evidence by the Labor Department counsel during the hearing.

Specifically, he zeroed in on a monthly rundown of average straight-time hourly earnings in the industry since March, nothing that they rose 4.6 cents an hour from March to July.

He allowed that the unions had split the difference on the high side, but justified this on the grounds that industry increases since March have been on an across-the-board basis and that the government figures did not take August, September and October into account.

Industry Has 30 Days to File Proposal

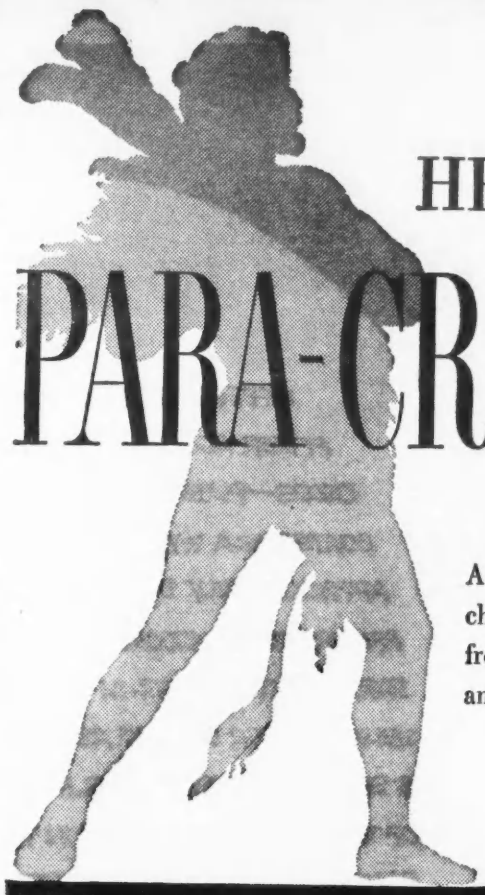
The drug industry has thirty days in which to file a wage proposal, but, under the wage-determination procedure, it must be based on facts brought out at the hearing.

Whether any proposal will be forthcoming from the industry is still very much a question. The hearing examiner asked industry representatives to waive their right to prepare a proposal, but Dr. Howard Binkley, PMA's director of economic research, insisted that the drug makers be given the opportunity to decide for themselves.

As of week's end, the industry had still not made up its mind whether to file a brief or not.

After the thirty-day period, the Labor Secretary will make a tentative wage determination, which will be followed by a twenty-one-day period for objections. Then will come the final wage determination, which will go into effect seven days after it is issued.

The new wage determination for the drugs and medicine industry will include botanicals, which formerly were not included in the industry classification.



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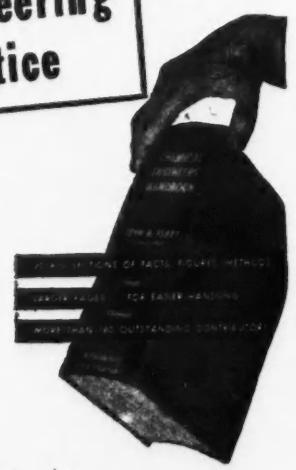

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HELEN, IS THE LIGHT TOO BRIGHT FOR YOU?

Drugs, Fine Chemicals

Price reductions were fairly common this fall with ascorbic acid, vitamin A and, more recently, lysine among the major chemicals affected. Back of each change to a significant extent were producers' desires to increase consumption by offering cost-conscious consumers a cheaper product. Historically, this strategy has worked out well and price-cutting of this type can logically be expected to continue as long as production economies can be realized. Otherwise, the near-term outlook generally is for stability.

Such perennially weak markets as penicillin, streptomycin and DHS are reportedly showing greater strength this fall with the upturn in domestic requirements coupled with steady, strong demands from abroad.

Continued good demand is also reported for citric acid, tartaric acid, aspirin and MSG. For all but the latter, prices are consequently firm—another stabilizing factor being the dominance of a few suppliers in each market.

MSG, on the other hand, is weak and a price reduction is likely to be announced before a new producer, which is currently offering only small quantities of the chemical, gets into volume production in mid-1962.

Imports of drugs and fine chemicals in August followed no definite trend. Seasonal factors presumably account for the decrease in shipments of foreign crude camphor and quinidine and for the increase in thiamine and pyridoxine.

Crude iodine imports were down appreciably—from 539,329 pounds in July to 237,429 pounds in August—with Chile in top spot on the suppliers' roster. Several months this year, Japan was in this position, having been awarded a large order by the US government.

Ascorbic Acid—August imports of vitamin "C" totaled 16,307 pounds, and, according to the Commerce department, were valued at $49,568 and dutied at $5,904.

Shipping here were: Japan, 10,142 pounds, valued at $26,954 and dutied at $2,829; France, 4,410 pounds, valued at $14,364 and dutied at $1,508; Denmark, 1,102 pounds, valued at $2,864 and dutied at $301; and the Netherlands, 653 pounds, valued at $5,386 and dutied at $586.

Domestic consumption is running into large volume and continued growth is expected due to just-lowered prices. Seasonal factors include greater requirements for C in tablet form as a cold preventive and in combination with other drugs in cold preparations.

Aspirin—Aspirin, or another salicylate, should be the first drug prescribed for victims of rheumatoid arthritis. Furthermore, according to Dr. James D. C. Gowans, of Tufts University School of Medicine, patients should be given the maximum-tolerated dosage of aspirin, and for a sufficient length of time, before trying another drug.

If, in the opinion of the attending physician, another anti-arthritic drug is indicated, "it should be given in addition to, not instead of, salicylates," Dr. Gowans says, for the latter are valuable for their analgesic and anti-inflammatory action.

As a rule of thumb, adult arthritic patients should be started by the physician on two, five-grain aspirin tablets at four-hour intervals for five doses daily. The dosage should be increased slowly, up to 12 to 21 tablets daily, depending on tolerance and needs, Dr. Gowans states.

Usage of aspirin in the treatment of arthritis, spurred by reports such as these, is steadily increasing. And, as people are living longer today and arthritis incidence increases with age, growth of this market is virtually assured.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
58.82	58.82	58.88	59.78

For Current Prices See Page 9

Lysine—The price of lysine has been cut 45c., with the quote now established at $4.50 a pound. In initiating the reduction, a major producer noted that food processors will probably be more interested in the amino acid now that the price is lower.

Since 1958, the schedule has been dropped twice—a total of $7 a pound—and each reduction reportedly spurred usage. Current markets: specialty breads, cold breakfast cereals, baby cereals, and pharmaceutical preparations in which lysine is combined with vitamins, minerals and other essential amino acids in therapeutic or daily maintenance formulations.

There are today two threats to growth of the chemical's markets: foreign competition and unfavorable publicity out of Washington.

Menthol—Although demand is increasing seasonally, prices are not participating in the uptrend. Adequacy of stocks, built up in the relatively quiet summer months, presumably is a factor.

Imports of natural menthol in August, at 171,496 pounds, were about 65,000 pounds higher than July volume, the increase signaling the start of the heavy-use pharmaceutical season here.

Bulk of the August inshipment came, as usual, from Brazil—153,636 pounds, valued at $816,078 and dutied at $53,774. In second place, Japan accounted for 9,000 pounds at $80,100.

The other suppliers: Taiwan 3,960 pounds at $25,494; West Germany 2,250 pounds, at $10,890; Australia 2,650 pounds at $16,961.

Synthetic menthol imports were also higher in August. Totaling 27,264 pounds, shipments were valued at $140,559 and dutied at $9,542. Shippers: France 18,705 pounds at $93,157; Spain 4,409 pounds at $30,656; West Germany 3,250 pounds at $14,215; and Australia, 900 pounds at $2,531.

Monosodium Glutamate — MSG is now being offered by a new producer—the fifth—but competition from the new entry, it's believed, it not yet keen. With volume production, expected in mid-1962, however, the firm will become a definite factor and it's not unreasonable to assume that a price cut will be announced about that time.

Prices for MSG are already weak, of course, but contrary to what was noted here earlier, the weakness is not as acute in the meat processing area as elsewhere. In fact, according to one report, MSG is commanding better prices than normal in

Drugs and Fine Chemicals Imports: August

Imports of selected drugs and fine chemicals for July and August, 1961, as reported by the Bureau of Census, were as follows:

		August	July
Ascorbic acid	lbs.	16,307	33,731
Caffeine	lbs.	110,375	175,433
Camphor, crude	lbs.	0	0
Refined	lbs.	62,552	22,300
Synthetic	lbs.	114,200	94,600
Iodine, crude	lbs.	237,429	539,329
Menthol:			
Natural	lbs.	171,496	104,889
Synthetic	lbs.	27,264	16,000
Pyridoxine	lbs.	440	242
Quinidine and salts	ozs.	29,853	132,328
Saccharin	lbs.	0	18,714
Sodium alginate	lbs.	17,600	51,935
Tartaric acid and anhydride	lbs.	309,194	566,731
Thiamine	lbs.	3,996	1,976
Theobromine	lbs.	7,762	8,800
Vitamins and vitasterols, n.e.c.	lbs.	32,186	80,416

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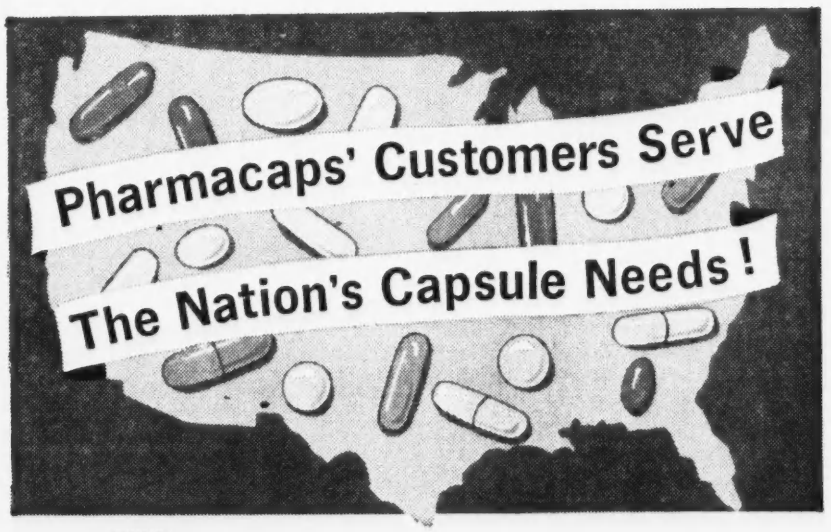

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Drugs, Fine Chemicals

this market because of the relatively small requirement.

Pyridoxine—August imports of vitamin B_6 were 440 pounds, valued at $13,669 and dutied at $1,435, according to statistics issued last week by the Commerce department. The entire quantity came from Japan.

This was the largest monthly volume since May when over 800 pounds were imported.

Thiamine—There was a huge increase in imports in August. Inshipments that month were 3,996 pounds as opposed to 1,976 in July. The rise probably anticipated greater fall demand from manufacturers of multi-vitamin preparations.

Foreign sources in August were Japan and Denmark. The former accounted for 3,503 pounds, valued at $15,388 and dutied at $1,615.

Botanicals

Moderate requirements in face of generally adequate stocks has limited price activity in botanicals' markets this fall. And where prices have been raised, higher replacement costs were usually responsible.

Imports detained by the Food & Drug Administration at the Port of New York during the two week period ended October 6 included 46 bags of karaya gum and 226 cases and 72 drugs of papain.

Irish Moss — Where available, Irish moss is selling at about 35c. a pound. Stocks are extremely tight and there won't be any new crop available until next year.

Jalap Root — Little interest is noted. Prices range from 55c. to 60c. a pound, 10c. higher on the powder.

Juniper Berries—Stocks are limited on spot and advices from abroad indicate that the new crop is extremely short. Consequently, higher replacement costs and higher prices here. Current quote: 25c. to 30c. a pound. Some sources feel that the shortness of the new crop has been exaggerated.

Psyllium—No changes here. Demand is normal, supplies adequate. Black seed, which has recently advanced, is selling at 42c. to 45c. a pound and blonde at 18c. to 20c. a pound. Husks are quoted at 45c. to 48c. a pound.

Drug & Fine Chemical Briefs

DRUG CONTROLS ITCHING: "Periactin" (cyproheptadine hydrochloride), an ethical drug shown to control many cases of itch, is introduced by Merck Sharp & Dohme, West Point, Pa., a division of Merck & Co. Offered in tablet form, it is recommended in the treatment of such itching skin conditions as hives, eczema, sunburn, insect bites, and chickenpox.

PRODUCT DEBUT: "Phazyme" is now available to physicians from Reed & Carnrick, Kenilworth, N.J., The drug contains a defoamer (dimethyl polysiloxane) and digestive enzymes (starch-, protein- and fat-digesting), is recommended in the treatment of gastrointestinal pain due to gas.

CAPSULE WITH TIMER: A timed-disintegration capsule that liberates the oral anti-diabetes drug phenformin ("DBI") slowly into the blood, producing a blood-sugar lowering effect for twelve to fourteen hours, is now available from US Vitamin & Pharmaceutical Corporation, New York. "DBI-TD" capsules retail at $12.75 per hundred.

NORACYMETHADOL AN OPIATE: Commissioner of Narcotics has made final an earlier ruling that noracymethadol has addiction-forming or addiction-sustaining properties similar to morphine, and, therefore, must be classed as an opiate.

VITAMIN-MINERAL TABLET: Parke, Davis & Co. is marketing "Paladac with Minerals," fruit-like flavored, chewable tablets that combine 10 vitamins and six minerals. The vitamins are: A, D, C, E, B_1, B_2, B_6, B_{12}, nicotinamide and pantothenic acid. Minerals: iron, calcium, phosprorous, acid. Minerals: iron, calcium, phosporous,

Honolulu Oil Corp. Sells Calif. Assets to Tidewater

Tidewater Oil Company has completed purchase of an interest in substantially all of Honolulu Oil Corporation's properties in California and an undivided one-half interest in Honolulu's undeveloped leases in Alaska.

At the same time, Honolulu sold an interest in its mid-continent, northern Rocky Mountain and Canadian properties to Pan American Petroleum Corporation.

Honolulu owned some 555 net oil and gas producing wells in California. Tidewater will operate the properties, and is offering employment to a majority of Honolulu's California operating employees.

Flotation Plant

—Continued from page 7

sabi iron ores, Utah keryllium ores, fluorspar, Bolivian tin ores and uranium.

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Cyanamid, Boots Cut Tabs On Drugs Sold to NHS

Cyanamid of Great Britain, subsidiary of American Cyanamid Company, and Boots, a drug store chain and drug making company, both are telling of substantial price cuts on drugs sold through the UK National Health Service.

Cyanamid's Lederle Laboratories is cutting "Ledercort" triamcinolone corticosteroid, "Lederkyn" sulfamethoxypyridazine, and "Miltown" meprobamate. Without stating prices to the NHS—all prescriptions sold to British consumers under the NHS cost 28 cents regardless of the drugs used—Lederle estimates the cuts will save the agency about $250,000 in a full year.

Boots is cutting two oral diuretics by 20 percent and estimates the cost saving for the NHS at $110,00 yearly. The two are "Aprinox" bendrofluazide and "Hydrenox" hydroflumethiazide.

Molybdenum Sponsors Research on Rare Earths

A new research project on the utilization of individual rare earth elements has been started at Pennsylvania State University, University Park, Pa., under the sponsorship of Molybdenum Corporation of America.

The program will concentrate on the uses of cerium, lanthanum, praseodymium, neodymium, gadolinium, europium and samarium. The project will study ore from Molybdenum Corporation's rare earth mine at Mountain Pass, Calif., and processed at plants in Washington and York, Pa. The Mountain Pass mine is said to be the world's largest bastnasite deposit, making the US self-sufficient in the rare earth elements.

Helium Unit Contract

—*Continued from page 5*

Ross Wilson, a technical advisor at Pandle, will serve as vice-president of operations, and Robert H. Cronwell, vice-president of engineering for the US Industrial Chemicals Company division of National Distillers, will be vice-president of the new company.

This is the second joint venture of the two parent companies. In 1953, they put up a major petrochemical complex at Tuscola, Ill.

Helium, a lighter than air gas, is playing a heavyweight role in the space age. In March, Interior announced a long range program of saving 52 billion cubic feet of helium during the next twenty-five years while simultaneously meeting current needs.

The contract with National Helium, similar to the two others already awarded, will run for twenty-two years, including the time for plant construction. Government purchases of helium during the life of the contract may aggregate more than $300 million.

On August 15, Secretary of the Interior Stewart L. Udall approved the first helium-purchase contract under the plan. It went to Helex Company, which will build a plant near Bushton, Kan. (OPD, 8/21/61), to supply a maximum of $9.5 million of helium a year.

A week later, the second contract went to Cities Service Helex, Inc., of New York, which will put up a plant near Ulysses, Kan., with a capacity to deliver 2 million cubic feet a day. Annual purchases may rage as high as $9.1 billion (OPD, 8/28/61). Operations are due to start early in 1963.

Phthalic Anhydride

—*Continued from page 4*

about one-quarter of all PA capacity in the US.

Under license from S-W to build reactors based on the process, Badger has erected a number of PA plants here and abroad since 1958.

These reportedly include facilities for Reichhold Chemicals, Inc., Monsanto Chemical Company, and the Hatco Chemical Division of W. R. Grace & Co., all in New Jersey and Union Carbide Chemical Company in West Virginia.

Abroad, Badger has used the process in plants for Dominion Tar & Chemical Company, Ltd., in Canada; Aziende Colori Nazional Affini in Italy; Chemishe Industrie Synres (Allied Chemical Corporation affiliate) in Holland, and Union Chimique Belge in Belgium.

Chemical Fertilizer Concern

—*Continued from page 4*

gas deposit in northern Holland by Royal Dutch and Standard Oil Company of New Jersey. This discovery creates the possibility of large-scale petrochemical production of nitrogen in Holland, and several schemes have been proposed with this in mind. Some such pooling had been forecast.

Staatsmijnen, Dutch state-controlled chemical and mining firm, is also going to increase its fertilizer effort. The current expansion project will give it 244,000 tons of nitrogen annual capacity by the end of next year against 229,000 tons last year.

The state company is also boosting plastic output to 78,000 tons by the end of 1962 against 38,000 tons in 1960. The expansion will be concentrated in caprolactam and high pressure polyethylene. It will also bring production of low-pressure polyethylene next year.

Northwest Chemical to Sell Conversion's Specialties Line

Northwest Chemical Company has concluded an agreement to distribute in midwestern states the chemical specialties produced by Conversion Chemicals Corporation.

Northwest Chemical, a Detroit, Mich., unit of the chemical products division of Chemetron Corporation, producers of chemicals widely used in the metal-working industry, including cleaning and phosphating chemicals. Conversion Chemicals, Rockville, Conn., produces the "Kenvert" line of chromates, brighteners, bright dips, deburring solutions and protective dips.

Rubber Industry Pushed

—*Continued from page 7*

field, working feverishly to build a strong synthetic and natural base.

According to an article appearing in the Russian periodical *Kauchuk i Resina*, and summarized by the Department of Commerce in the Office of Technical Services publication "English Abstracts of Selected Articles from Soviet Bloc and Mainland China Technical Journals," the Red Chinese are now producing butadiene-styrene. Butadiene-nitrile and polychloroprene rubbers are also being produced.

Rubber plantations have been developed in areas of southern China, and plantation of *hevea* rubber trees has increased by thirty times and consumption of raw rubber by eleven times since 1949.

Output of carbon black has been expanded and the industry now produces some twenty different kinds. For tire cord, both nylon-6 and viscose tire cord factories are being built.

With all this progress, it is noted that every effort must be bent on developing raw material sources, expanding the machine industry, organizing scientific research institutes, improving technology and development of synthetic rubber production.

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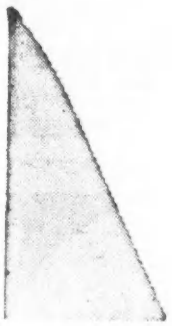

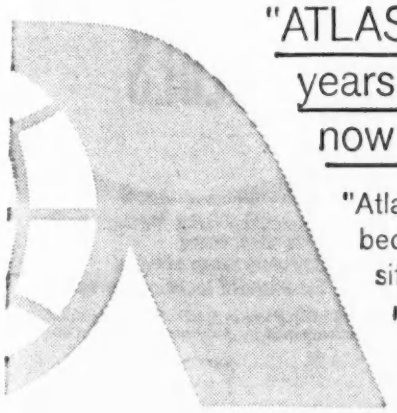

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"Atlas Powder Company," our former corporate name, became less and less descriptive as we grew and diversified into fields other than explosives. Four moves, made since early 1959, emphasize our diversification...

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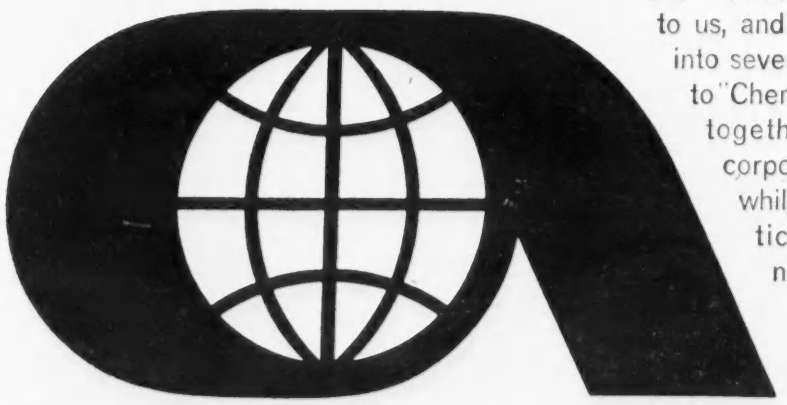
Our Explosives Division is building, and will operate for Solar Nitrogen Chemicals, Inc., a $15,000,000 facility for making ammonia, urea and related products. Solar is owned equally by Atlas and The Standard Oil Company (Ohio).

Our International Division was formed to take over export of all Atlas products, and to direct and expand manufacturing and marketing operations outside of the United States.

The Stuart Company was recently merged with and into Atlas. As an Atlas Division, it will continue to manufacture and market ethical pharmaceuticals.

The "Powder"—or explosives—business is still important to us, and we expect it to remain so. Diversification into several chemical fields led us to change "Powder" to "Chemical," and to bring all our corporate operations together under "Industries." So, our new official corporate name is "Atlas Chemical Industries, Inc."... while the past lives on as we retain our original NYSE ticker symbol—"APC." We hope you like the new name...and that you'll continue to call us "ATLAS."



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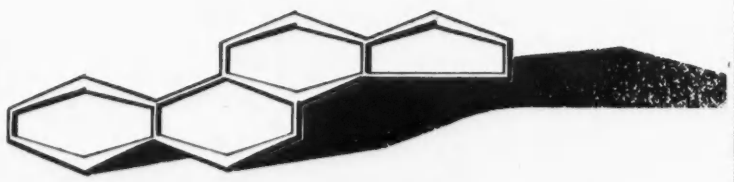

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Chemical Water Treatment Facility Is Set for Uruguay

A contract for a new water treatment plant to provide Montevideo, Uruguay, with 116 million gallons of treated water has been awarded to Infilco, Inc., a subsidiary of General American Transportation Corporation, Chicago.

The new water treatment plant is the first project to receive US assistance following the Alliance for Progress meeting for economic development in Latin America, held last August in Punta del Este, Uruguay.

The $7.5 million project has been financed through the Export-Import Bank of Washington and the Inter-American Development Bank.

Funds authorized by the Export-Import Bank of Washington include a loan of $1.9 million to the government of Uruguay for the purchase of filter equipment and controls and storing and feeding equipment for chemicals.

Tall Oil Installation

—Continued from page 3

diately, and the plant is expected to be in operation within a year.

Crude tall oil is derived from soap skimmings, a by-product of the kraft pulp process. The soap skimmings are now disposed of as fuel by Pacific Northwest kraft mills. Hercules says this plant makes available, for the first time, a market for crude tall oil from the pulp mills in this area. Extensive chemical research and market development work by Hercules, and others, has made possible the production of many useful chemical derivatives from the by-product.

The fatty acids, obtained from processing the crude tall oil, find a major market in the manufacture of protective coatings as well as in such industries as printing inks, linoleum, petroleum processing, flotation agents, disinfectants and detergents.

Rosin made at the Portland plant will be processed into chemicals for the paper industry and other rosin-consuming industries.

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Coating Materials

Effective November 20, 1961, a major producer of phthalocyanine blue and green pigments has announced price increases on several items in the phthalocyanine line. Blue toner will advance 10 cents per pound and green toner 15 cents per pound. On the blue, the crystallizing type will advance, but the crystal stable type will remain unchanged. Resinated blue and green will remain unchanged. Aqueous pigment dispersions will advance 2 cents per pound on most grades, but one super blue grade will advance 10 cents per pound and one super grade green 5 cents. Water dispersable blue and green will remain unchanged. Blue colors for plastics will go up 2 cents per pound and green colors for plastics will go up 4 cents per pound.

Correspondingly, pigments used as the prime obliterating factor in all forms of protective coatings, have been moving at relatively lower business volume this year than might have been expected, running anywhere from moderate for pigments used strictly in paints, up to "better than last year" business volume on pigments that get into other than the paint industry. Titanium dioxide is a case in point, where there is significant consumption in paper and textiles, in floor coverings and other non-paint outlets.

The plasticizer market is holding firm at price levels established some weeks ago, and business volume is looking up as the fourth quarter begins. Trading in shellac is still sluggish, natural resin consumption is hardly more than routine, and zinc pigments are just beginning to move in moderately better volume. Alkyd resins, vinyls, and epoxies are expected to spurt ahead as the auto strikes are settled, and 1962 models get into full-scale production.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(1100 = 1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
104.69	104.69	104.69	103.14

For Current Prices See Page 9

Prime Pigments

Chrome Green—CP chrome green colors, according to the Bureau of Census, were turned out during August of this year in the amount of 587 tons, as compared with the revised July figure of 363 tons and 501 tons produced in August of last year. Stocks at producing plants at the end of August amounted to the equivalent of around one month's production. Demand which has been sluggish in recent weeks, has started to pick up in response to the general improved business situation developing in the fourth quarter. Strikes in the automotive industry have tended to delay demand for chrome colors somewhat, but this matter is about straightened out.

Chrome Yellows—The Bureau of Census reported total chrome yellow and orange pigment production for August as 2,119 tons as against the 1,159 tons turned out in July and 1,724 tons produced in August of last year. Demand for chrome yellows and oranges for industrial finish use is stepping up significantly in October, although somewhat below expectations because the business situation is not spurting ahead as rapidly into the fourth quarter as most economists had anticipated. Fourth quarter business, however, is expected to be good. August closed with stocks on hand of 2,857 tons.

Molybdated Orange — Production of these pigments in August was reported by the Bureau of Census as amounting to 668 tons, as compared with a July output of 3 2 tons, and some 569 tons produced in August of 1960. Inventories are running around 782 tons as of the end of August.

Phthalocyanine Colors—Effective November 20th the price of certain blue and green phthalocyanine colors will be advanced in price, as mentioned in more detail at the top of this page.

Titanium Dioxide—The Bureau of Census reported August production on a 100% TiO_2 basis, as 42,165 tons, compared with the revised figure for July of 42,287 tons, and the 34,891 tons turned out in August of last year. Stocks on hand at the end of August amounted to 69,723 tons, just slightly under the July-end stocks of 69,-815 tons.

Price patterns of recent weeks on titanium dioxide pigments, including the 30 ton carlot price bracket set up last month, are expected to hold firm for the balance of the year. Demand, which has been good all along is getting gradually higher as we get into the fourth quarter.

Synthetic Resins

Polyethylene — New uses for polyethylene fabricated materials continues to develop. A large petroleum producing company has just begun the initial use of high density polyethylene pipes for gas gathering lines at its Texas gasoline plants. One of these lines was an 8,000 foot line of 6-inch pipe, and an additional 13,000 feet of 6-inch and 2-inch high density pipe is also operational in another of the company's plants. Among the advantages claimed for such polyethylene pipe installations are that they are rot, corrosion, and bacteria resistant and has good resistance to solvents, acids, alkalies, and hydrogen sulfide in the oil wells.

The railroads, motor carriers, and the Interstate Commerce Commission have approved the use of shipping bags made of certain copolymers for the shipment of chemicals such as ammonium nitrate. These bags are made of a modified ethylene/butene-1 coplymer resin. Other fertilizer materials, as well, may now be shipped in these bags. Bags made from 7 mil film of this copolymer are said to have 2½ times the burst strength of 10 mil conventional polyethylene film, and 38 percent more tensile strength.

Miscellaneous Materials

Asbestos—Business volume in asbestos is good, and running ahead of last year. August asbestos fiber shipments this year ran 15 percent ahead of August, 1960. For the first eight months of this year fiber shipments were up 3.5 percent over the corresponding period of last year. The supply situation on all grades is described as quite adequate to meet all calls with prompt shipment.

Production in Rhodesia in July amounted to 14,155 short tons, compared with 11,456 short tons turned out in July of 1960. Canadian production in July was 96,888 tons from Quebec and 5,602 tons from various other provinces, making a total Canadian July output of 102,490 tons.

Asphalt—According to the Bureau of Census, asphalt roofing sales in August amounted to 6,874,249 squares, as compared with the revised July figure of 5,866,744 squares and an output of 6,817,-286 squares during August of 1960. Asphalt siding sales amounted to a total of 89,303 squares in August, as against the July revised figure of 72,512 squares, and 84,347 squares turned out in August of last year.

Saturated and coated felts, in terms of short tons, amounted to 90,190 tons of asphalt felts and 5,113 tons of tar felts in August. One year ago these figures stood at 90,990 tons and 8,154 tons respectively.

Casein—New production in the Argentine is still slow in materializing, and hence offerings are light. Both European and United States domestic buying interest in casein is said to be improved. Argentine casein prices during the week ranged from 18½c. to 19¼c., with most trading in the range of 19c. to 19¼c. An occasional deal was reported as high as 19½c. to 19¾c. This indicates strength in the market as well as reflects the dearth of new production.

Polish casein offerings are very light with practically no 30 mesh available, and 60 mesh material offered for October at 18¾c. to 19c. French supplies are limited at prices ranging from 17¾c. to 18½c. per pound. Limited amounts from Australia are offered for October/January deliveries at 20c. to 20½c. per pound, while spot shipments were made at 21½c. New Zealand remained unchanged at 24c. to 25c. per pound.

Paint Driers—There is a growing interest in, and good trade acceptance of

—*Continued on page 68*

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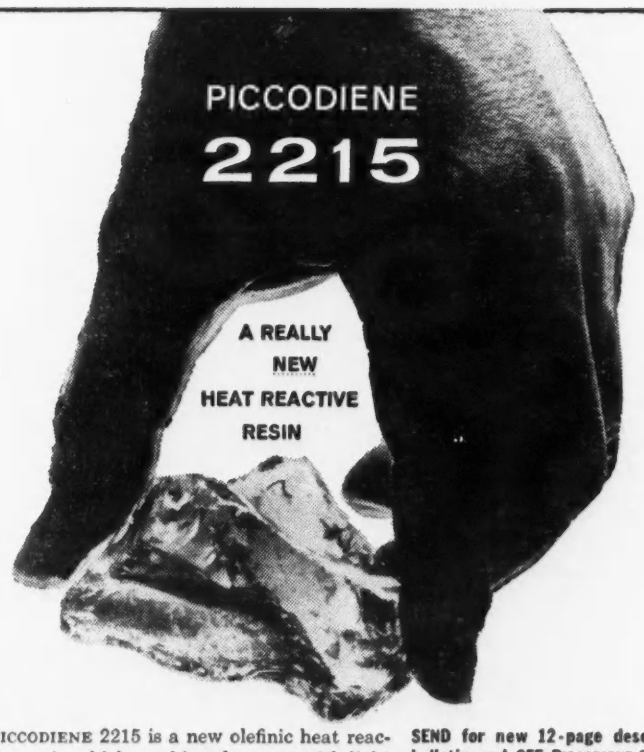

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REFRACTIVE INDEX AT 25° C.	1.56

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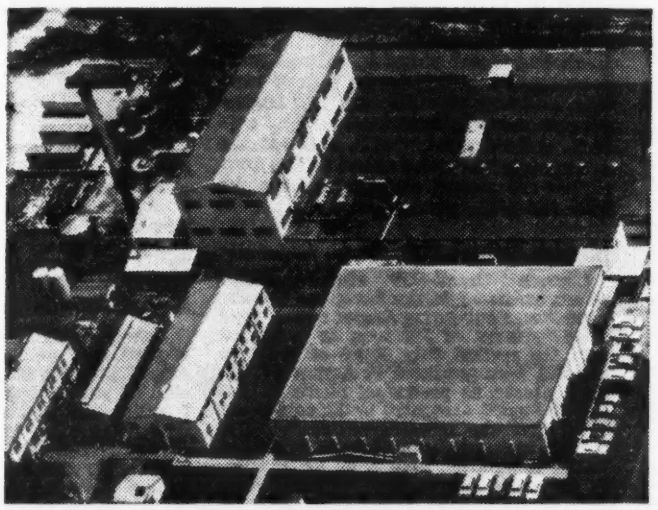
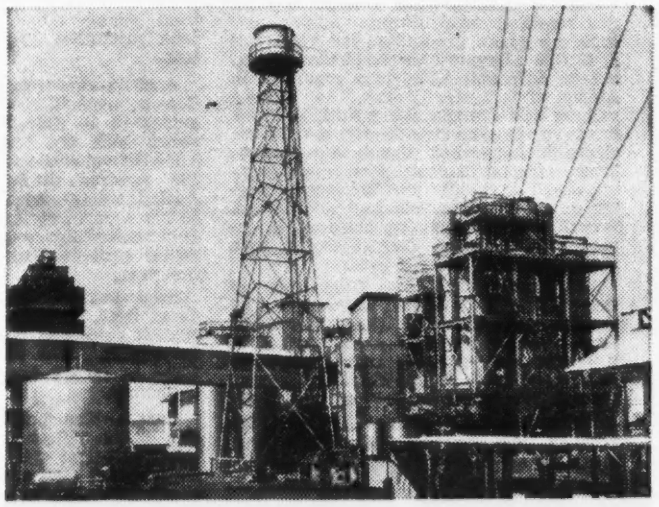


Florida SUN-FILLED citrus oils are produced at 3 Minute Maid plants — Plymouth (shown above), Auburndale and Leesburg, Florida.



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Essential Oils, Aromatics

Lemongrass and Formosan citronella both continue strong with few offerings at source. Spot prices remain unchanged, but firm. Sandalwood, on the other hand, is leveling off following a period of more than a year of unprecedented firmness. Spot prices of sandalwood still continue at their previously-quoted levels, however. Bourbon geranium is easier for shipment, but Algerian material continues firm. Mexican cut and whole vanilla beans continue quite firm due to the shortness of this year's crop, but Bourbon material is reported to be easier, with some slight price reductions noted. Bourbon dropped from $6.75-$7 per pound to $6.60-$6.85 per pound.

Both peppermint and spearmint are said to be leveling off following weakening in the spot markets, due to the arrival of new crop material.

Linalool is being produced in India, but not on a large scale as yet. Similarly, many esters such as methyl cinnamate have been produced, but the production is uncertain because many of the basic materials are imported. These facts are from the *Chemical Industry News, Journal of the Indian Chemical Manufacturers Association*. Coumarin is not yet produced in India. If the salicyl-aldehyde can be supplied cheaply, it can be manufactured by a small unit profitably. Phenyl ethyl alcohol is used in considerable amounts in India.

Its syntheses by the ethylene oxide route is accomplished, but with difficulty. Phenyl propyl alcohol can be produced easily but no one has taken up its production yet. Synthetic jasmine has been made in India by a new process. The method is under exploitation. The higher ketones like civetone, muscone can be produced but this area is awaiting further development until the intermediates are available.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
142.95	142.95	142.97	144.94

For Current Prices See Page 9

Imports Detained at N. Y.

Two-Week Period Ending Oct. 6

Black pepper, 16 lots, 2,444 bags.
Cassia, 9 lots, 3,032 bags.
Celery seed, 16 lots, 2,259 cases.
Coriander seed, 5 lots, 1,600 bags.
Cumin seed, 140 bags.
Fenugreek seed, 250 bags.
Ginger, 2 lots, 141 bags.
Mace siftings, 20 cases.
Mustard seed, 300 bags.
Nutmeg, 70 bags.
Pimento, 54 bags.
Sesame seed, 2 lots, 1,102 bags.

Essential Oils

Citronella—Material from Formosa continues strong "for no apparent reason" according to reports from essential oil brokers who are in touch with conditions abroad.

Geranium—Bourbon material is reported to be easier at source for future shipments.

Spot price remains at $14 per pound. Spot price for Algerian material continues at its previous level, $21 per pound.

Ginger—Exports of ginger have risen in recent years partly because India has been exporting an increasing proportion of her production and partly because Taiwan has been exporting larger amounts of material. This fact is from the Committee on Commodity Problems, Trends in the World Market for Spices, of the Food and Agriculture Organization of the United Nations.

Ginger is native to tropical Asia and is cultivated primarily in India, China, Japan, Jamaica and West Africa. Production fluctuates somewhat from year to year, but the trend seems to be downward. Exports from Jamaica and Sierra Leone, which constitute an appreciable share of these countries' total exports, have been declining.

The principal importers are the United Kingdom, Aden, South Arabia and Egypt, and the United States. The Western countries generally prefer ginger from Jamaica and Sierra Leone. Indian ginger has a higher fibre content and is imported mainly by the Middle East where consumption is rising. Malayan imports are partly for re-export.

Lemongrass—News from source is that the market continues strong with no sign of weakening. Few offerings are being made at source.

Material continues, on spot, at the very high price, $3 per pound.

Sandalwood—The market at source has leveled off.

Spot prices continue at their previous highs, $27 per pound, and up.

Aromatic Chemicals

Geraniol — According to *Chemical Industry News, Journal of the Indian Chemical Manufacturers Association*, in 1959, India exported over 22 tons of geraniol. The report states that India looks for expansion in this field.

Hydroxycitronellal—In 1959 India produced 5 tons of hydroxycitronellal even though the licensed capacity is only 1½ tons. And, according to the *Chemical Industry News*, it would be advisable to increase licensed capacity and production.

Seeds and Spices

Cardamon—Guatemala decorticated material has dropped in price from $2.50 per pound to $2.45 per pound. Other grades of cardamoms remain at their previously-listed prices.

Ginger—Cochin material is firm. From its previous price, 23½c. per pound, it has risen to 25c. per pound. Sierra Leone, Jamaica and Nigerian material remain at their previously-listed prices.

Nutmegs—East Indian shrivels dropped from 92c. per pound to 90c. per pound. Other grades of nutmegs, however, remain substantially the same.

Essential Oil Imports: August

	Principal Origin	Pounds	$ Value
Cinnamon Leaf, Cinnamon	Ceylon	3.584	$5.692
Geranium	France	7.631	79.971
Rose, Otto of Roses*	France	948	36.054
Bergamot	Italy	7.631	79.971
Citronella	Taiwan	78.892	74.854
Lemongrass	India	134.172	250.742
Lavender	France	42.291	54.473
Lavender Spike	Spain	16.768	23.017
Lemon	Italy	17.315	54.750
Orange	Italy	2.316	11.854
Sandalwood	India	5.026	103.581
Lime	Mexico	46.093	210.943
Caraway	Netherlands	1.257	4.329
Cananga	France	6.595	44.086
Lignaloe	Peru	16.108	21.604
Palmarosa	India	1.257	6.078
Petitgrain	Paraguay	11.285	23.292
Rosemary	Spain	14.529	15.399
Clove	Madagascar	107.722	102.569
Eucalptus	Spain	24.139	9.527
Patchouli	Indonesia	3.260	14.860
Vetivert	Haiti	3.990	34.196

Source: Bureau of Census.
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Essential Oils

Oregano—Greek material advanced from 23c. per pound to 25c. per pound. Mexican is listed at 23c. per pound.

Pepper — Malabar remains at 44c. per pound as does Lampong black. Muntok white dropped from 57c. per pound to 56c. per pound.

The Food and Agricultural Organization of the United Nations reports that world production of peppers fell by more than one half during World War II, mainly as a result of destruction of plantations in Indonesia, the principal pre-war supplier.

Since the war, India has been the largest producer, with an output substantially above pre-war levels. Total world output, although it recovered from the very low immediate post-war level, has remained below pre-war: the substantially higher production in India and Sarawak being insufficient to compensate for the heavy fall in Indonesia and Cambodia. Production outside Asia is relatively unimportant, but has risen notably in Brazil and to a lesser extent in Madagascar.

Vanilla Beans—Dealers report a slight weakening in the price of Bourbon material. Current price is now $6.60 to $6.85.

Mexican material, however, continues firm. Cut material continues to range between $7.50 and $7.70 per pound and whole material continues to range between $7.80 and $8 per pound.

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Oils, Fats and Waxes

Corn oil continued to move upward last week, advancing 3½ cents to 25 cents per pound to the highest level since February, 1951. Demand continued keen, with production sold up. Offerings were scarce and held at higher levels. Peanut oil also was stronger and scarce with sales made at ½ cent higher. Cottonseed and soybean oils were irregular and fractionally lower. Crude coconut oil commanded little interest and market declined slightly. Improved demand for olive oil on spot has materially reduced stocks and strengthened the local market.

Firmer tone prevailed in tallow and greases because of improved export business which advanced quotations fractionally. Offerings continued light and well held at the advance.

Activity in industrial oils was chiefly for delivery against current contracts, with new business spotty for prompt needs. Linseed oil remained steady and unchanged. Tung oil was quiet but firmly held at currently high levels. Brazilian castor oil demand was slow and offerings were shadable. Oiticica was well held at unchanged prices. Crude menhaden oil remained unchanged and steady.

Oilmeals were in better demand and firmer. Soybean and cottonseed meals advanced $1 per ton, and linseed meal $2.50 per ton.

CCC has purchased approximately 120 million pounds of vegetable oil shortening, 50 million pounds of soybean salad oil, and 30 million pounds of cottonseed salad oil for donation to needy people abroad. The oil is to be delivered Nov. 15, 1961, through March 31, 1962. The purchases are part of the program announced by the Agriculture Department to supply about 400 million pounds of vegetable oil products under the Food-for-Peace program.

Offers were received Oct. 16 for a total of 46,942,213 pounds. Eighteen firms submitted 45 bids for 297,325,000 pounds of shortening, 15 firms 22 bids for 60,186,994 pounds of cottonseed salad oil and 17 firms 36 bids for 106,430,219 pounds of soybean salad oil.

Price Trends

Advanced

Cocoa butter, 2c. per lb.
Corn oil, crude, 3½c. per lb.
Refd., 3½c. per lb.
Cottonseed meal, $1 per ton.
Greases, ½c. per lb.
Linseed meal, $2.50 per ton.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean meal, $1 per ton.
Tallow, edible, ⅝c. per lb.
inedible, ½c. per lb.

Reduced

Carnauba wax, No. 2, refd., 2c. per lb.
No. 3, crude, 1c. to 2c. per lb.
No. 3, refd., 3c. per lb.
Yellows, 4c. per lb.
Coconut oil, ½c. per lb.
Copra, $2.50 per ton.
Cottonseed oil, crude, ½c. per lb.
Refd., ½c. per lb.
Lard, cash, 3/10c. per lb.
Ouricury wax, refd., 1c. per lb.
Rapeseed oil, 1c. per lb.
Soybean oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 21, 1960
112.84	111.59	110.94	107.44

For Current Prices See Page 9

Vegetable Oils

Castor—Steadier tone prevailed in Brazilian oil. No. 1 was held at 16½c. per pound, tankcars, New York, prompt delivery. Domestic grades were maintained at former levels.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	2,600,000
Previous week	.....	1,100,000
Corresponding week, 1960	.....	3,130,000
Total this year	.....	76,030,000
Corresponding period, 1960	3,353,450	72,330,000

Coconut—Trading was reported slow. Crude was easier at 11c. per pound, tankcars, f.o.b. Pacific coast, October shipment and 12⅜c., nominal f.o.b. New York, prompt delivery.

The Bureau of Customs announced preliminary coconut oil imports for consumption at 99,697,554 pounds from January 1 to September 30, 1961.

Corn—Price trend continued upwards and advanced 3½c. Crude was sold and bid at 25c. per pound, tankcars, f.o.b. mills and reached the highest level since February, 1951. Refined oil was stronger and lifted to 28.23c., tankcars, New York, prompt delivery.

Cottonseed—Futures backed and filled closing moderately lower on the New York Produce Exchange last week. Trading was mainly professional. Hedging pressure was still light. Cash oil demand was slow. Refined salad was easier with crude and quoted at 15⅞c. per pound, tankcars, New York, prompt delivery.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, October 20, follow:

	Sales	Cents per Pound High	Low	Close
Dec.	345	13.88	13.63	13.71@13.73
March	153	13.98	13.77	13.81@13.84
May	155	14.11	13.88	13.90 S
July	41	14.05	13.90	13.88@13.92
Sept.	6	13.75	13.70	13.70@13.71

Total sales and switches, 700 contracts.

Weather conditions for harvesting the cotton and soybean crops were favorable.

Crude declined ⅛c. when active trading subsided, the market easing off at the close. In the Valley the market was slightly lower at 11⅞c., tankcars, f.o.b. mills, prompt shipment; southeast ranged from 12c. to 12⅛c. and Waco, 11⅞c.

Linseed—Market was unchanged and steady. Withdrawals against contracts continued active. Demand for fill-in needs was fair. Raw oil was quoted at 15.2c. per pound, tankcars, Minneapolis, October-December, delivery; 15.4c., January-March and 16.28c., tankcars, f.o.b. New York.

Linseed oil sales in September totaled 137,609,956 pounds of which 232,000 were sold for export. Total sales for August-September were 151,182,820 pounds including 294,000 for export it was reported by the National Flaxseed Processors Association.

Olive—This market was steady for spot and shipment. Sales took place at $2.35 to $2.40 per gallon, drums, exwarehouse, according to quantity. Spot stocks were smaller and closely held. The Spanish market remained firm at $53.50 per 100 kilos, drums, f.o.b. ports, October-November shipment.

Palm—Small lots were in fair demand for immediate needs. Prices were unchanged. Drums were quoted at 14¾c. to 15¾c., spot as to quantity and 12c. for tankcars.

Peanut—Scarcity of stocks kept this market firm. Offers were scarce. Crude was ½c. higher and sold at 19c., tankcars, mills, prompt shipment. Refined oil was was advanced to 22¼c., tankcars, New York, prompt delivery.

The Agriculture Department has announced that moderate quantities of peanuts from the new 1961 crop will be offered for domestic crushing on a competitive bid basis to meet immediate domestic requirements for peanut oil. The first offering last week consisted of 300 tons in the Southeast.

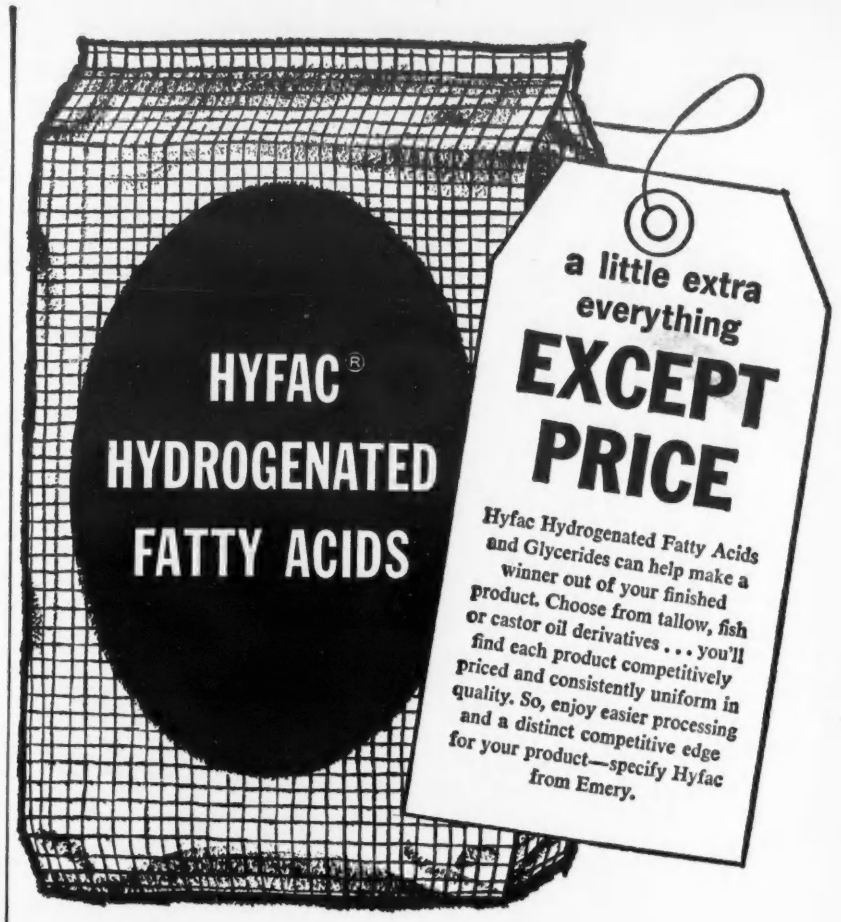
The department also announced a national marketing quota of 1,006,000 tons and a national allotment of 1,610,000 acres for picking and threshing for the 1962 crop of peanuts. Growers approved quotas for the 1960, 1961, and 1962 crops in a referendum Dec. 15, 1959.

Rapeseed—New crop oil was lower and quoted at 16c. per pound, tankcars, New York for November forward delivery. Drums were reduced to 18c. to 18¼c., as to quantity.

Soybean—Trading was reported spotty. Crude was easier and declined to 10⅝c. per pound, tankcars, Decatur, unrestricted, October shipment. Refined salad was lower at 12⅞c., tankcars, New York, prompt delivery.

Israel purchased 5,000 tons of soybean oil last week for January-February shipment and United Arab Republic 4,300 tons, November shipment.

The Department of Agriculture has an-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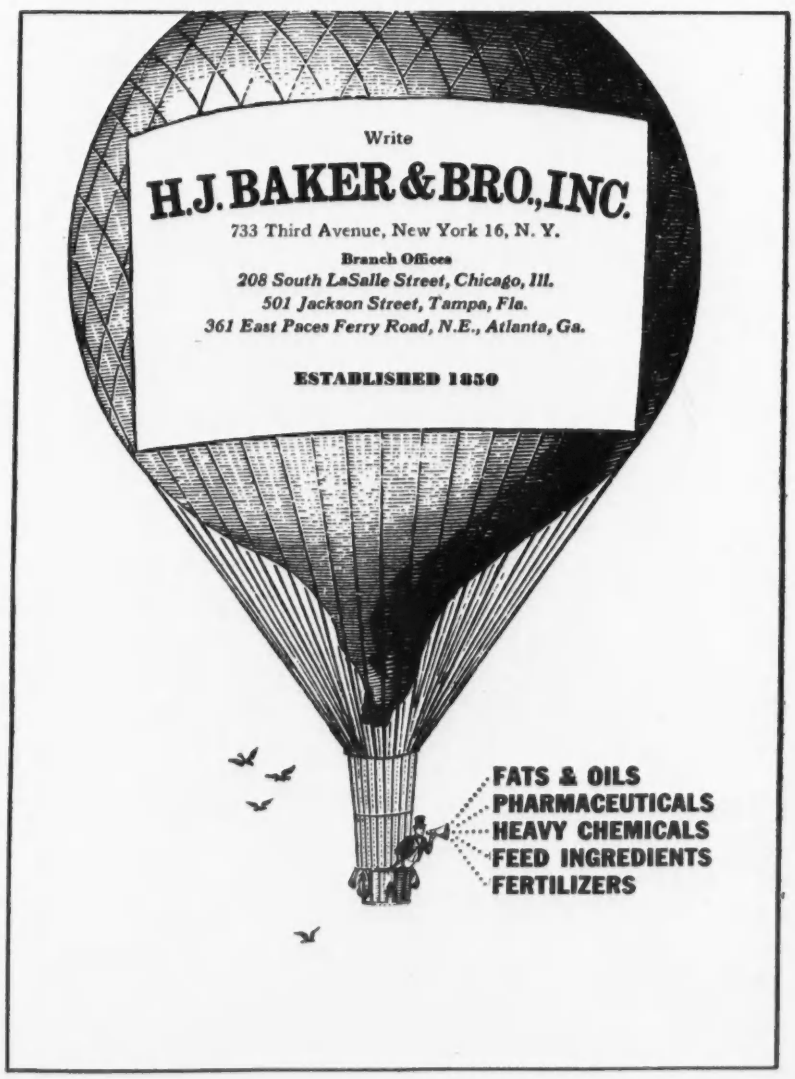

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Oils, Fats and Waxes

nounced the status of fats and oils purchase authorizations issued to importing countries under PL 480. From the beginning of the Title I program through October 16, 1961, purchase authorizations totaling about $622.7 million (including some ocean transportation costs) were issued for fats and oils. The breakdown by commodities is as follows: soybean and/or cottonseed oil, $576.2 million (approximately 1,826,000 metric tons); lard, $25.7 million (approximately 81,600 metric tons); tallow or grease and oil, $18.8 million (approximately 91,400 metric tons); linseed oil, $2 million (approximately 3,600 metric tons).

Tall—Withdrawals against contracts continued active. Prices were unchanged and firm. Crude was scarce and strong ranging from 3¼c. to 3½c. per pound, f.o.b. works, depending upon seller. Most of recent business took place at the outside figure. Acid refined ranged from 7½c. to 8¾c., tankcars, works as to grade and distilled, 7½c. to 8½c., same basis. Tall oil fatty acids were in excellent request and firmly held at unchanged prices.

Tung—Tight supply situation kept the market firm. Business was light, chiefly for actual needs. Offerings were few. Tankcars were closely held at 30¼c. to 30½c. per pound, New York for prompt delivery. Drums ranged from 32c. to 32½c.; spot, as to quantity.

Miscellaneous

Cocoa Butter—Market was stronger, reflecting low stocks on the spot. Prices were higher at 58c. to 63c. per pound, depending upon quantity.

Copra—Market was quiet and lower. Prompt shipment was quoted at $150 per ton, c.i.f. Pacific coast.

Flaxseed—Dullness pervaded this market on the heels of preceding week's flurry. Only a few cars traded in the spot market and to-arrive bookings were lowest of many weeks. Harvesting is near completion. Bids were unchanged at $3.55 a bushel, spot and to-arrive, basis Minneapolis.

Flaxseed crushed in September totaled 2,105,857 bushels bringing the total to 3,592,266 bushels for August-September, according to the National Flaxseed Processors Association.

Fats and Greases

Greases—Improved demand and light offerings stiffened the market. Quotations were raised ⅛c. Yellow grease was firm at 5¼c. to 5¼c. per pound, tankcars delivered as to grade and choice white 7⅝c. to 7⅝., same basis.

Lard—Market was unsteady and lower. Cash lard closed at 8.175c. per pound, drums, Chicago.

Tallow—Improved export business created a steadier tone. Prices were raised ⅛c. to ¼c. per pound. Offerings continued light and were firmly held. Bleachable fancy was quoted at 5¾c. per pound, tankcars, delivered; prime, 5⅝c.; guaranteed fancy, 6⅛c.; special, 5½c. and No 1, 5⅛c., same basis. Guaranteed fancy was held at 6½c. per pound, bulk, f.o.b. steamer and 7½c. to 7⅝c., drums, f.a.s.

Cake and Meal

Cottonseed Meal—This market was firmer due to improved trading. Production has increased and moving in good volume. Meal 41 percent was higher at

—Continued on page 64

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80 dms, Heemsoth Kerner, Liverpool
37 dms, Carbic Hoechst Corp, Rotterdam
46 dms, Sandoz Inc, Havre
20 dms, Geigy Chemical Corp, Havre
2 dms, Hooker Chemical Co, London
153 dms, Geigy Chemical Corp, Bremerhaven
477 dms, Rotterdam
ANISE SEED—200 bgs, Izmir
ANNATTO SEED—63 bgs, Foreign Domestic Distributors, Callao
130 bgs, Salentine & Co, Callao
ANTIMONY OXIDE—890 bgs, Indussa Corp, Antwerp
492 bgs, Havre
ARABIC GUM—1,021 bgs, Bankers Trust Co, Port Sudan
100 bgs, Manufacturers Trust Co, Port Sudan
505 bgs, National City Bank, Port Sudan
1,250 bgs, Bank of N Y, Port Sudan
150 bgs, Chemical Bank, Port Sudan
300 bgs, Chase Manhattan Bank, Port Sudan
550 bgs, Port Sudan
ARROWROOT FLOUR—1,102 bgs, Morningstar Paisley Inc, Itajai
ARSENIC, WHITE—57 dms, Lo Curto & Funk, Marseille
BARIUM CHLORATE—36 dms, Tar Residuals Inc, Rotterdam
BASIL LEAVES—70 bls, Louis Furth, Marseille
BAY OIL—1 dm, Magnus Mabee & Reynard, Port of Spain
BEESWAX—50 bgs, Machado & Co, Ciudad Trujillo
197 blks, Wm Diehl & Co, Djibiuti
100 bgs, Wm Diehl & Co, Talcahuano
100 bgs, Analy Corp, Talcahuano
186 blks, Assab
81 bgs, Puerto Plata
31 bgs, Ciudad Trujillo
BENZOIN GUM—77 bdls, Meer Corp, Singapore
BERGAMOT OIL—20 cs, J Manheimer, Naples
BILE ACIDS—8 dms, Merck & Co, Buenos Aires
BLEACHING POWDER—60 dms, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—7 dms, Polarome Manufacturing Co, Belem
BONE—168 bgs, Velleman Corp, Santos
321 bgs, International Packers Ltd, Montevideo
500 bgs, Santos
BRONZE POWDER—110 dms, Hamburg
BRUCINE SULFATE—10 cs, Frank Samuel & Co, Southampton
CALCIUM CARBONATE—1,000 bgs, Smith Chemical & Color Co, Liverpool
2,200 bgs, Whittaker Clark & Daniels, Liverpool
800 bgs, N H Weitzner, Antwerp
600 bgs, Pluess Staufer, Antwerp
800 bgs, Antwerp
CALCIUM CARBONATE, PRECIPITATED—360 bgs, J T Baker Chemical Co, London
60 bgs, C B Chrystal Co, London
CALCIUM NITRATE—1,000 bgs, Atkins Kroll & Co, Rotterdam
500 bgs, McKesson & Robbins, Oslo
CAMPHOR POWDER—25 cs, Keelung
CARAWAY SEED—150 bgs, P H Petry, Rotterdam
200 bgs, Hoger Corp, Rotterdam
600 bgs, Rotterdam
CARBON, ACTIVATED—125 bgs, Connor Engineering Corp, London
CARDAMOMS—30 cs, Cochin
CARMINE—5 dms, H Kohnstamm, London
CARNAUBA WAX—100 bgs, Latina Trading Co, Salvador
155 dms, Frank B Ross, Fortaleza
56 bgs, Cornelius Wax Refining Corp, Fortaleza
63 bgs, Frank B Ross, Parnahiba
188 bgs, Smith & Nichols, Parnahiba
188 bgs, Strahl & Pitsch, Parnahiba
CASHEWNUT SHELL LIQUID—100 tons, Cochin
CASSIA—2,290 bls, Rotterdam
CASTOR OIL—300 tons, Wallace & Tiernan, Santos
300 tons, Woodward & Dickerson, Salvador
200 tons, Baker Castor Oil Co, Salvador
CELERY SEED—170 bgs, M J Golombeck, Bombay
160 bgs, Fritzsche Bros, Bombay
85 bgs, M J Golombeck, Marseille
100 bgs, Otto Gerdau, Marseille
60 bgs, Levy & Levis Co, Marseille
200 bgs, Mincing Trading Corp, Marseille
346 bgs, Levy & Levis Co, Bombay
170 bgs, Frank Tea & Spice Co, Bombay
34 bgs, Wm E Martin & Sons, Marseille
CHAMOMILE FLOWERS—10 bgs, Meer Corp, Marseille
20 bls, S B Penick & Co, Marseille
CHAMOMILE LEAVES—3 bgs, Norwalk Mills, Marseille
CINNAMON QUILLS—50 bls, Max Van Pels, Colombo
100 bls, Delano Corp of America, Colombo
CINNAMON BARK OIL—1 cs, Volkart Bros, Colombo
CINNAMON LEAF OIL—9 dms, George Lueders & Co, Colombo
CITRONELLA OIL—25 dms, Givaudan Corp, Keelung
COCONUT OIL—450 tons, Marwood Co, Zamboanga
525 tons, Bank of America, Zamboanga
650 tons, American Trust Co, Cebu
501 tons, Cebu
975 tons, Zamboanga
1,305 tons, Manila
CODLIVER OIL—95 dms, Arista Oil Products Corp, Aalesund
COPAL GUM—251 bgs, Bankers Trust Co, Matadi
35 bgs, S Winterbourne & Co, Singapore
CORN STARCH—2,000 bgs, Impex Agricultural Corp, Rijeka
1,400 bgs, Rotterdam
100 bgs, Amsterdam
CORNMINT OIL—3 dms, Magnus Mabee & Reynard, Santos
CREAM OF TARTAR—500 bgs, Leonhardt & Brush, London
CRESOL—5 cks, Biddle Sawyer Corp, Rotterdam
CRESYLIC ACID—604 tons, Midland Tar Distillers, Liverpool
46 dms, M W Hardy & Co, London
CUBE POWDER—575 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—72 bgs, Marcel Calvet & Co, Istanbul
220 bgs, Khorramshahr
DAMMAR GUM—70 bgs, O G Innes Corp, Singapore
50 cs, O G Innes Corp, Bangkok
50 cs, S Winterbourne & Co, Bangkok
DEGRAS—22 dms, Gerhard & Hey, Liverpool
48 cs, Robinson Wagner Co, Liverpool
DEXTRIN—300 bgs, Stein Hall & Co, Rotterdam
550 bgs, Morningstar Paisley Inc, Rotterdam
200 bgs, Morgan Guaranty Trust Co, Rotterdam
720 bgs, Rotterdam
700 bgs, Amsterdam
4,4-DIAMINOSTILBENE—2'2-DISULFONIC ACID
107 dms, Advance International Ltd, Liverpool
DINITROBENZOL CHLORIDE—1 cs, Aceto Chemical Co, Liverpool
DYES, COALTAR—10 dms, Sandoz, Inc, Havre
25 dms, Toms River Chemical Corp, Rotterdam
8 dms, Wedeman & Godknecht, Hamburg
13 dms, L & R Organic Products, Rotterdam
155 dms, Sandoz Inc, Rotterdam
EARTH COLORS—1,100 bgs, Naftone Inc, Bremen
1,742 bgs, United Ultramarine & Chemical Co, Rotterdam
105 bgs, Rotterdam
ELEMI GUM—80 cs, O G Innes Corp, Manila
EPHEDRINE HYDROCHLORIDE—10 dms, Burroughs Wellcome & Co, London
FATTY ALCOHOL—402 bgs, Copenhagen
FENNEL SEED—255 bgs, M J Golombeck, Buenos Aires
GALL—6 dms, George Uhe Co, Barranquilla
1 dm, Wilson & Co, Puna
GELATIN—100 bgs, T M Duche & Sons, Havre
134 bbls, Riches Nelson, Antwerp
630 bgs, T M Duche & Sons, Antwerp
200 bgs, Corbett & Co, Marseille
400 bgs, First National Boston, Hamburg
200 bgs, King Shipping Co, Antwerp
331 bgs, Transatlantic Animal By Products Corp, Antwerp
332 bgs, Manhattan Adhesives Corp, Hamburg
133 dms, B Young, London
GERANIUM OIL—2 dms, Djibouti
GERMANIUM OXIDE—40 cs, Antwerp
GINGER—137 bgs, Cobal Trading Co, London
GLUESTOCK—575 bls, Brown Bros, Barranquilla
400 bdls, A M Goldstein, Puerto Cabello
GRAPHITE—500 bgs, Asbury Graphite Mills, Hong Kong
250 bgs, Asbury Graphite Mills, Colombo
GUAR GUM—100 bgs, Meer Corp, Rotterdam
200 bgs, Meer Corp, Genoa
300 bgs, Wedeman & Godknecht, Genoa
112 dms, Davies Turner & Co, Liverpool
105 dms, D H Burdett, Liverpool
448 bgs, Morningstar Paisley Inc, Liverpool
200 bgs, T M Duche & Sons, Rotterdam
GYPSUM, CRUDE—20,857 tons, U S Gypsum Co, Hantsport
2,260 tons, National Gypsum Co, Walton
HEPTANOIC ACID—387 dms, International Selling Corp, Marseille
HEXACHLOROETHANE—500 bgs, International Seling Corp, Marseille
HOOF & HORNMEAL—648 bgs, A M Goldstein, Santos
733 bgs, Martin Baer & Co, Santos
HORNMEAL—2,130 bgs, Transatlantic Animal By Products Corp, Santos
HYDROCHLOROTHIAZIDE—1 cs, Genoa
HYDROXYCITRONELLAL—10 cks, George Uhe Co, Marseille
ICHTHAMMOL—10 cs, Chas L Huisking & Co, Hamburg
IRON BLUE—7 dms, Van Oppen & Co, Liverpool
IRON CARBONYL—33 dms, General Aniline & Film Corp, Rotterdam
JABORANDI LEAVES—64 bls, A M Fenton & Co, Parnahiba
KARAYA GUM—248 bgs, Stein Hall & Co, Bombay
124 bgs, Block Drug Co, Bombay
LACTIC ACID—50 dms, A Millner Co, Liverpool
32 cks, Rhodia Inc, Marseille
LACTOSE—40 dms, Rotterdam
LAUREL LEAVES—420 bls, Izmir
LAUREL WAX—119 bgs, Strohmeyer & Arpe, Buenaventura
LAVENDER FLOWERS—40 bgs, S B Penick & Co, Marseille
LAVENDER OIL—5 dms, George Uhe Co, Marseille
5 dms, Marseille
LAVANDIN OIL—17 cs, Polarome Manufacturing Co, Marseille
16 cs, Marseille
LEAD, WHITE—400 bgs, Rotterdam
LEMON PEEL—40 bgs, H Marmorek & Son, Alicante
LEMON VERBENA LEAVES—10 bgs, Norwalk Mills, Marseille
LEMONGRASS OIL—105 dms, Volkart Bros, Cochin
30 dms, Givaudan Corp, Cochin
46 dms, Cochin
LICORICE ROOT—26 bls, S B Penick & Co, Trieste
LIME OIL—2 dms, Citrus & Allied Essential Oils Co, Puerto Plata
7 dms, Port Au Prince
LINDANE—180 dms, International Selling Corp, Marseille
LIVER CONCENTRATE—9 dms, Buenos Aires
LIVER POWDER, DESICCATED—15 dms, S B Svendsen, Buenos Aires
LOCUST BEAN GUM—360 bgs, T M Duche & Sons, Rotterdam
100 bgs, Nehls & O'Connell, Genoa
200 bgs, Stein Hall & Co, Liverpool
MACE—50 cs, Kitt Landes & Co, Singapore
MAGNESITE—2,305 bgs, Cochin
MAGNESIUM CARBONATE—35 cs, Antwerp
4 dms, Callao
MAGNESIUM TRISILICATE—100 dms, Rotterdam
MANNITOL—3 cs, Roussel Corp, Havre
MARJORAM—50 bgs, Hismoco American Co, Marseille
60 bgs, Levy & Levis Co, Marseille
60 bgs, Louis Furth, Marseille
MENTHOL—50 cs, Kane Import Corp, Santos
155 cs, Schwabach & Co, Santos
175 cs, Bemo Shipping Co, Santos
100 cs, Fritzsche Bros, Santos
9 dms, Cannes
MERCURIC OXIDE—22 bbls, Hudson Shipping Co, Rijeka
MERCURY—50 flks, Leghorn Trading Co, Leghorn
100 btls, Leghorn
METHYL ETHYL KETONE PEROXIDE—20 cans, Rotterdam
MINERAL WAX—500 bgs, Hamburg
MONTAN WAX—100 bgs, Hamburg
10 bgs, Rotterdam
MUSTARD SEED—1,400 bgs, Berns & Koppstein, Copenhagen
NAPHTHALENE—500 bgs, Gallard Schlesinger, Antwerp
NAPHTHOL—240 dms, Rotterdam
NUTMEG—560 bgs, East India Trading Co, Singapore
72 bgs, Dodge & Olcott, Singapore
200 bgs, K H Landes & Co, Singapore
280 bgs, Ungerer & Co, Singapore
70 bgs, M J Golombeck, Singapore
282 bgs, National City Bank, Penang
252 bgs, P H Petry, Hamburg
194 bgs, Rotterdam
OAKMOSS—160 bgs, Givaudan Corp, Rijeka
OITICICA OIL—300 tons, Brazil Oiticica Inc, Fortaleza
OLIVE OIL—50 dms, S M Wolf Co, Alicante
595 dms, Seville
OURICURY WAX—50 bgs, Smith & Nichols, Salvador
OXGALL—4 dms, International Packers Ltd, Townsville
1 dm, International Packers Ltd, Gladstone
PALM KERNEL OIL—1,112 tons, Matadi
PAPAIN—81 cs, Bemo Shipping Co, Mombasa
PAPRIKA—500 bgs, A A Sayia, Alicante
600 bgs, J Weinstein, Alicante
PECTIN—81 dms, T M Duche & Sons, Copenhagen
PEPPER, BLACK—140 bgs, Otto Gerdau, Singapore
140 bgs, A G Dunn, Singapore
300 bgs, P H Petry, Belem
400 bgs, Mitsui & Co, Belem
100 bgs, Kellys America Ltd, Belem
140 bgs, C Czarinkow, Singapore
160 bgs, A A Sayia, Cochin
960 bgs, Cochin
800 bgs, Belem
PEPPER, WHITE—140 bgs, A G Dunn, Singapore
PETITGRAIN OIL—25 cs, Polarome Manufacturing Co, Buenos Aires
PETROLEUM, CRUDE—330,448 bbls, Signal Oil & Gas Co, Puerto La Cruz
300,000 bbls, Humble Oil Co, Freeport
263,017 bbls, Humble Oil Co, Puerto La Cruz
129,216 bbls, Ashland Oil & Refining Co, La Salina
265,320 bbls, California Oil Co, Sidon
104,405 bbls, Sohio Petroleum Co, Maracaibo
129,447 bbls, Hess Inc, Puerto Cardon
PIGMENT-d POWDER—10 dms, Stanley Daggett, Rotterdam
PIMENTO—160 bgs, M J Golombeck, Kingston
48 bgs, Kellys America Ltd, Kingston
PIMENTO LEAF OIL—4 dms, Fritzsche Bros, Kingston
POPPYSEED—100 bgs, Frank Tea & Spice Co, Rotterdam
100 bgs, J Beiler, Rotterdam
100 bgs, I Grob, Rotterdam
200 bgs, Foreign Domestic Sales Corp, Rotterdam
500 bgs, Rotterdam
POTASH, CAUSTIC—176 dms, Rotterdam
POTASSIUM CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
POTASSIUM FERROCYANIDE—1,000 bgs, Haras Co, Rotterdam
POTATO STARCH—480 bgs, Stein Hall & Co, Rotterdam
PRUSSIAN BLUE—45 dms, Tar Residuals Inc, Rotterdam
PSYLLIUM SEED—40 bls, S B Penick & Co, Marseille
PSYLLIUM SEED, HUSKS—132 bgs, S B Penick & Co, Bombay
265 bgs, Foodline Inc, Bombay
PYRETHRUM FLOWERS—28 bls, Astoria Panamericana, Callao
232 bls, P H Petry, Callao
PYRITES—225 cks, American Metal Climax, Leixoes
QUEBRACHO EXTRACT—1,126 bgs, International Products Corp, Buenos Aires
1,325 bgs, Tan American Corp, Buenos Aires
QUININE ALKALOID—1 cs, Frank Samuel & Co, Southampton
RAPE SEED—264 bgs, Hinton & Co, Copenhagen
RAPE SEED OIL—413 tons, Smith Weihmann Co, Karlshamn
RESINS, VINYLIC—800 bgs, Havre
ROSE BUDS—40 bgs, H Marmorek & Son, Marseille
ROSE HIPS—300 bgs, Meer Corp, Rijeka
SAGE LEAVES—770 bls, V A Cardovi, Rijeka
SANDALWOOD OIL—4 cs, Florasynth Lab, Cochin
5 cs, International Flavors & Fragrances Inc, Cochin
20 cs, Cochin
SEEDLAC—500 bgs, United Shellac Corp, Calcutta
250 bgs, Capitol Shellac Corp, Bangkok
SESAME OIL—78 dms, I R Boody & Co, Copenhagen
SESAME SEED—331 bgs, Hoger Corp, Santos
SODIUM ALGINATE—6 dms, E Mendell Co, Havre
SODIUM BROMATE—150 dms, Rotterdam
SODIUM CYANIDE—300 dms, Chemical Manufacturing Co, Liverpool
100 dms, Ugine Industries, Havre
SODIUM FERROCYANIDE—280 bgs, Antwerp
SODIUM PERBORATE TETRAHYDRATE—1,500 bgs, Chemical Manufacturing Co, Liverpool
SODIUM PHOSPHATE—50 bgs, Bensicker Inc, Rotterdam
SODIUM SILICOFLUORIDE—300 bgs, Chemical Manufacturing Co, Liverpool
TALC—1,375 bgs, L A Salomon & Bro, Bordeaux
300 bgs, C B Chrystal Co, Bombay
6,015 bgs, Charles Mathieu, Genoa
TAMARINDS—114 bbls, St Johns
TAPIOCA—551 bgs, Stein Hall & Co, Itajai
TAPIOCA FLOUR—551 bgs, Tapioca Associates, Itajai
9,554 bgs, Stein Hall & Co, Itajai
3,088 bgs, Stein Hall & Co, Kohsichang
896 bgs, Poons Co, Kohsichang
2,544 bgs, Morningstar Paisley Inc, Kohsichang
TARTARIC ACID—280 kgs, Ceribelli & Co, Genoa
TERPIN HYDRATE—30 cks, Bordeaux
THEOBROMINE—10 dms, George Uhe Co, Rotterdam
THEOBROMINE—10 dms, George Uhe Co, Rotterdam
THYME LEAVES—40 bgs, Louis Furth, Marseille
72 bls, N Y Plant, Marseille
100 bgs, M J Golombeck, Marseille
THYROID POWDER—3 dms, Buenos Aires
TOLU BALSAM—25 dms, Barranquilla
TONKA BEANS—60 cks, Machado & Co, Port of Spain
40 cs, Meer Corp, Belem
TRICHLOROETHYLENE—299 tons, International Selling Corp, Marseille
ULTRAMARINE BLUE—240 bgs, Whittaker Clark & Daniels, London
VEGETABLE OIL—3 dms, Polarome Manufacturing Co, Hamburg
76 dms, Amato Agency, Copenhagen
VEGETABLE ROSIN—15 cs, Stein Hall & Co, Ciudad Trujillo
ZINC OXIDE—480 bgs, London
ZIRCON SAND—8,640 bgs Metal & Thermit Corp, Brisbane

Los Angeles

AGAR—31 bls, Moorhead & Co, Barcelona
ALUMINUM FLUORIDE—1,000 bgs, F F Dow Co, Port Alfred
BONEMEAL—500 dms, Antwerp
CASEIN—1,117 bgs, A J Mills & Co, New Plymouth
CINNAMON QUILLS—25 bls, McClintock Stern Co, Singapore
80 bls, Singapore
COPRA—1,000 tons, Cargill Inc, Zamboanga
500 tons, Wells Fargo Bank, Zamboanga
1,000 tons, Wells Fargo Bank, Davao
600 tons, Procter & Gamble Co, Jagna
1,000 tons, Procter & Gamble Co, Medina
700 tons, Procter & Gamble Co, Dumaguete
800 tons, Procter & Gamble Co, Cebu
1,000 tons, Davao
CORN STARCH—50 bgs, H M Newhall & Co, Bremen
DEXTRIN—800 bgs, Morningstar Paisley Inc, Amsterdam
EARTH COLORS—720 bgs, H Hartry, Bremen
900 bgs, Naftone Inc, Bremen
IRON OXIDE—1,000 bgs, F D Davis Co, London
600 bgs, Malaga
LIVERMEAL—560 bgs, R P Hawkins & Co, Dunedin
PEPPER, BLACK—80 bgs, California Commodities Corp, Singapore
210 bgs, Internatio Rotterdam, Singapore
POPPYSEED—100 bgs, R J Spitz, Rotterdam
UREA—12,500 bgs, Wilson & Geo Meyer & Co, Heroya
2,500 bgs, Antwerp
ZIRCON SAND—2,185 bgs, Frank Samuel & Co, Brisbane
1,199 bgs, Mattoon & Co, Brisbane
440 bgs, Brisbane

Philadelphia

ANTIMONY OXIDE—320 bgs, National Lead Co, Glasgow
CALCIUM CARBONATE—4,400 bgs, Antwerp
CALCIUM PHOSPHATE, DIBASIC—370 bgs, Wessel Duval & Co, Antwerp
CASTOR OIL—200 tons, Santos
300 tons, Salvador
CHESTNUT EXTRACT—340 bgs, Barkey Importing Co, Naples
CRESYLIC ACID—150 dms, Concord Chemical Co, Glasgow
DIVI DIVI—353 bgs, Keer Maurer, Buenaventura
FUEL OIL—271,837 bbls, Texaco Co, Trinidad
LICORICE ROOT—4,465 bls, Izmir
MAGNESIUM CHLORIDE—200 bgs, Smith Chemical & Color Co, Hamburg
NAPHTHA—112,174 bbls, Texaco Co, Trinidad
PETROLEUM, CRUDE—307,024 bbls, Gulf Oil Corp, Mina Al Ahmadi
153,538 bbls, Gulf Oil Corp, Bachaquero
532,130 bbls, Gulf Oil Corp, Bandar Mashur
203,496 bbls, Texaco Co, Covenas
231,043 bbls, Atlantic Refining Co, La Salina
178,483 bbls, Atlantic Refining Co, Puerto La Cruz
132,867 bbls, Atlantic Refining Co, Pamatacual
357,068 bbls, Atlantic Refining Co, Puntade Palmas
227,789 bbls, Mobil Oil Co, Mina Al Ahmadi
240,312 bbls, Shramrock Oil Co, Mina Al Ahmadi
110,054 bbls, Hess Inc, Puerto La Cruz
PHOSPHATE ROCK—3,200 tons, Curacao
QUEBRACHO EXTRACT—360 bgs, Barkey Importing Co, Buenos Aires
SHELLAC—200 bgs, F H Paul & Stein Bros, Hamburg
SODIUM CYANIDE—250 dms, Chemical Manufacturing Co, Glasgow
TAPIOCA FLOUR—3,087 bgs, Brown Bros, Itajai
666 bgs, Stein Hall & Co, Itajai
1,344 bgs, Tupman Thurlow, Kohsichang
UREA—1,000 bgs, Nylos Trading Co, Genoa

San Francisco

CALCIUM CARBONATE—200 bgs, Pluess Staufer, Antwerp
CASSIA—256 bls, Magna Enterprises, Singapore
DEXTRIN—600 bgs, Arabol Manufacturing Co, Amsterdam
FISHMEAL—200 tons, Wilbur Ellis Co, Callao
110 tons, Sun Kist Foods, Callao
750 tons, Callao
GYPSUM, CRUDE—12,443 tons, Kaiser Gypsum Co, San Marcos
MOLASSES—2,448 tons, California Molasses Co, Victorias
OREGANO—220 bgs, H M Newhall & Co, Salina Cruz
PINE OIL—567 dms, Sugerman Bros, Amsterdam
SESAME SEED—300 bgs, Wheeler & Miller, Corinto

Bids Wanted

Brush Varnish, Various Mil. Specs., 89,520 ea., various destinations. Bid IFB 63077-966-62B Oct. 26. Availability of Specs., Dwgs., and Spec. Exception. Specs. avail. at Naval Supply Depot, Attn: Code CDI, Building 26, 5801 Tabor Rd., Philadelphia 20, Pa. Drawings and Spec. Exceptions avail. at Military Industrial Supply Agency, Attn: Code 7211. Bldg. 36, 700 Robbins Ave., Philadelphia 11, Pa.

Carbon Removing Compound, Two-phase liquid, FSN 9YM 6850-550-7453, Spec MIL-C-19853 dad 19 Feb. 57. Deliveries to various destinations, 21,285 gal. Bid IFB 160-397-62B Oct. 31. Yards and Docks Supply Office, Port Hueneme, Calif., Attn: Purchasing Division.

Dishwashing, Compound, 383,450 lb. Bid IFB QM(MGS) 44-193-62-790 Nov. 9. Directorate for Procurement Military General Supply Agency, Richmond Quartermaster Depot, U. S. Army, Richmond, Va.

Enamel, Spec MIL-O-17970B F/80 Amend 1, 9,000 gal., delivery to NSC Oakland, Calif. Bid IFB 63077-940-62B Oct. 30. **Enamel,** Spec Fed TT-E-485 Amend 6 Type 8 (QPL), 12,870 pails, various destinations. Bid IFB 63077-928-62B Nov. 13. **Enamel,** Fed Spec TT-E-489C, Class A (10), 18,700 gal., various destinations. Bid IFB 63077-933-62B Nov. 13. Enamel, Spec MIL-P-17970B Ships Amend 1, 2,763 gal., various destinations. Bid IFB 63077-913-62B Oct. 30. Enamel, Spec MIL-P-17970B (Ships) Amend 1, 12,580 pails, various destinations. Bid IFB 63077-902-62B Oct. 27. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Mercury, NF 1 lb., 9,384 btl., RFP 11032Q, RFP Due Date Oct. 24. An additional quantity of 50 percent is being reserved for labor surplus area under a partial determination. Military Medical Supply Agency, 3rd Ave. and 29th St., Brooklyn 32, N. Y.

Paint, Heat Resisting, Spec Fed TT-P-28A, 3,108 gal., various destinations. Bid IFB 63077-963-62B Oct. 31. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Primer, Vinyl-Red Lead, orange color, formula No. 119 per Mil Spec. MIL-P-15929A as amend by CG Spec. CGS-52P-4C, 2,200 gal. in 1-gal. can, 3,800 in 5-gal. bucket. Specs avail. Bid IFB 235-62-B Oct. 25. Coast Guard Supply Center, 31st St. and 3rd Ave., Brooklyn, N. Y.

Remover, Paint, Spec Fed TT-R-251D Amend 1, Type III, Class B, 400 drums, to be delivered to NSY Puget Sound, Brem., Wash. Bid IFB 63077-964-62B Oct. 31. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Sodium Carbonate, Anhydrous, in accord with Fed Spec O-S-571E, Type II, 7,000 sacks. Bid IFB 6786 Oct. 25. General Services Administration, Region 8, Business Service Center, Bldg. 41, Denver Federal Center, Denver 25, Colo.

Solvent, Dry Cleaning, Type I and II, Fed Spec P-S-661B; **Thinner,** 0-8-5, grade I, Fed Spec 55-T-291A only, various quantities, various destinations. Bid IFB 62-58 B Oct. 31. Military Petroleum Supply Agency, Washington 25, D. C.

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Lead Lined Sulphonators • Glass and Lead Lined Reactors • Vacuum Shelf Dryers • Cast Steel, Welded Steel NITRATORS • Shriver & Day Filter Presses • Mikro and Raymond Pulverizers • Steel Ball Mills • Rotary Blenders • Condensers • Receivers • Autoclaves • Blow Cases • Stills • Truck Dryers • Refrigeration Units

EVAPORATORS — KETTLES

5295—Buflovak Stainless Steel Sanitary Thermo-Compression Evaporator with all accessories
3750—Zaremba Double Effect INCONEL Evaporator with calandria; 430 sq. ft. of surface; with accessories
3274—Swenson Quadruple Effect Long Tube Evaporator
3475—Zaremba Single Effect Cast Iron Evaporator; 130 sq. ft. Copper tubes
2895—Devine Single Effect Cast Iron Calandria type; 28"x8'
3870 M2—Mojonnier 3' Dia. S/S Calandria Evaporator; 30.5 sq. ft.
5020—Stainless Electrically Heated 60 Gal. Vacuum Evaporator; 20"x40" with Heat Exchanger
2598 D1—Copper Vacuum Pan 275 Gal.; 40"x72" overall; coil heated
487—Zahn & Nagel Continuous Evaporator; 2500 lbs. per hour, wiped surface, falling film.
3497 S7—Jacketed Crystallizers; 24"x12'
5411 C15-20—Five Baker Perkins Stainless Steel Jacketed Kettles 540 Gal. 4'x5'5" with agitators; Bolted Manhole Covers
3994 K4—Stainless Vacuum Still; Coil Htd. 755 Gal. 4'6"x6'; with Column
4840 B36—Electrically Heated 800 Gal. Stainless Steel Kettle 60"x60"
4840 B39—1200 Gal. Steel Kettle, Electrically Heated: 74"x68"
4840 B37—Stainless Vertical Kettle 5'x8'9", 1300 Gal. set in a cooling Jacket
5529 Y1-2—Two Pfaudler Stainless Steel Jacketed 1500 Gal. Vessels, 5'x10'
5048 D1-2—Struthers Wells Type 316 Stainless Vertical Mixing Kettles, 2000 Gal. 6'x10' Jktd. and Agitated
5291 A6—Stainless Steel 2000 Gal. Jacketed Kettle: 64"x10'8"

MIXERS

4343 D—7 Baker Perkins Heavy Duty Jacketed Mixers Sigma Double Arms; Size 17; 200 gal. working
5070 F1-2—Stainless Lined Double Sigma Vacuum Mixers; 300 Gal. 56" x 50" x 44"; with 60 HP Motors
4921 T53—Baker Perkins Hexagonal Jacketed Baratte; 150 Gal. good for Vacuum; 36" x 39"
4261—Jacketed Crutcher; 100 Gal. 36" x 24"; bevel gear drive
5475 T1—Lancaster Counter Currebt Batch Mixer; 12" x 5" Pan; 6" Muller
3668-H1—Lancaster Model EAG 3; diameter 45⅝"; 5½ cu. ft.
5512—Patterson-Kelley Twin Shell Blender; 5 cu. ft. Motorized
5471 B1-2—Sturtevant Rotary Blenders Size 7; 7' x 40'; 125 cu. ft. Motorized
M29 A402—Struthers Wells Rotary Blender 6' x 6'
5005—Blaw Knox Conical Blender 9'6" Dia; 10,000 lb.
M29 C800—Sturtevent No. 12 Rotary Batch Blender; 450 Cu. Ft. 40 HP
5360—Day MOGUL Double Arm 150 Gal. Jacketed Mixer good for Vacuum; 75 HP

CENTRIFUGALS

4483 G27—Tolhurt 40" Rubber Covered; Perforate Basket; 5 HP
5504—Western States 40" STAINLESS Steel Perforate Basket; 25 HP Vertical Motor
4507 A-16—Six Tolhurst 40" Suspended type centrifugals Rubber Covered Perforate Basket and Curbs; Monel Plow; 2 Speed Motors, 7½-15 HP
5147 S13-14—Two Bird 24" Continuous Horizontal Centrifuges in MONEL and Rubber Covered
4279 L1—Sharples H2 Nozzlejector; 15 HP XPL; 100 GPH
3240 M3—Sharples Supercentrifuge MB4-21-1JY S/S
4737 A-18-19—Two Sharples Super Centrifuges Type M85-34-5 with 2 HP motor
5161 B6—Sharples Stainless Steel Pressure Tite No. 16 Centrifuge
4311 S1—Sharples C 27 Super-D-Hydrator In Type 316 Stainless; 40 HP
4737 A20-21—Two De Laval Centrifugal Oil Clarifiers; Model 65 N13
4945—De Laval Industrial Hermetic Separator No. VO-244 in Type 316 Stainless with motor
3269—Sharples DeWaxing Centrifuge; Type DM202-23C
4081 N22—Patterson-Columbia Separator Centrifuge; Non-Corrosive: 7½" HP
4366—Podbielniak Counter Current Solvento Extractor; Type 316 contact parts

FILTERS—FILTER PRESSES

5340 W13-15—Two Aluminum Plate & Frame Filter Presses 7" x 7"; 10 Chambers
4831 D20-21—Two Sperry 10" Ni-Resist Filter Presses; 8 chambers
4682 D1—Sperry 12" Type 316 Stainless Filter Press; Type 47; 4 eye; five chambers
4831 D6-7—Two Sperry 12" Ni-Resist Type 41 Filter Presses; 8 Chamber
4041 P6—Shriver Aluminum 12" Filter Press; 2 eye; Closed Delivery
4041 P5—Shriver 18" Aluminum Filter Press; 18 chamber; 2 eye C. Del.
5041 D2—Sperry 18" Stainless P. & F. Type 41 Filter Press
5540 T21—Special Lot of J. H. Day Round Recessed Plate Open Delivery Filter Presses; 18" and 24"
4388 D2—Shriver Cast Iron Pl. & Frame Filter Press 24"; 4 eye; closed del. ratchet closing
4755 D1-3—3 Shriver Cast Iron 24" Filter Press; Three Eyed; Closed Delivery; Ratchet Closing
5540 T20—Special Lot of SHRIVER FILTER PRESSES in Cast Iron, Wood, Ni-Resist; 24"-30" 36" (also many Skeletons)
5134—Sperry 30" Pl. & Fr. Ni-Resist 24 Chamber Press
3787 E5—Shriver 30" C.I. 30 Chamber P.&F. O.D.
4343 D13—Sperry Cast Iron 30" Plate & Frame Press
1501 M4—Sperry 30" Type 31 Wood P. & F. Filter Press; 40 chamber; Hydraulic Closing
3989 K1—Independent 32" Wood Pl. & Fr. 68 chambers; 2 eyed; cl. del.
4254—Shriver STEAM JACKETED 36" Filter Press; C.I. 29 chambers; Seco cl.
3834 E6—Sperry 36" Type 41 Filter Press; Hydr. Closure; Cl. Del.
3673 L41—Sperry 36" Aluminum Filter Press 33 chambers; 4 eye with hydraulic closing pump and motor
4352 A1—Shriver C.I. 42" P.&F. Filter Press; 4 eye; closed delivery

CEMENT EQUIPMENT—TENNESSEE LOCATION

Allis Chalmers machinery for entire raw and finish grinding departments. Capacity 4000 barrels per day. Mills and Separators may be purchased separately.

RAW END (WET): Two 7' x 22' Mills (two compartment).
FINISH GRINDING: One 9'6" x 10' Preliminator Ball Mill.
Three 7' x 22' Mills (single compartment).

Each of these mills has Meehanite liners, feeder and direct coupled 400 HP 3/60/2200 V. motor. Operated in closed circuit with three 14-ft. Raymond DOUBLE WHIZZER Mechanical Air Separators, new in 1950, each V-belt driven by 75 HP motor. Connected bucket elevators, screw conveyors, feeders, etc., included.

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Oils, Fats and Waxes

—Continued from page 62

$57 to $58 per ton, sacked in the Mississippi Valley; $62, Alabama and Georgia and $62 to $63, Carolina area, October-December shipment.

Linseed Meal—Improved demand and tight supplies strengthened this market. Prices for prompt delivery advanced $2.50, deferred unchanged to 50c. higher. Extracted meal, 34 percent protein, was higher at $56.50 a ton, bulk, in carlots, f.o.b. Minneapolis, October delivery; November-December. Old process expeller meal was unchanged $59.50, October, $61, November - December; $62.50, January-March.

Soybean Meal—Strength persisted in this market, influenced by higher soybeans prices as the result of marked farmer holding tendency, along with improved feed business. Unrestricted meal advanced $1. Deferred meal was at $1 discount, unrestricted, while in part of Midwest the discount for November was $2 to $2.50. Meal, 44 percent protein, was held at $56.50 per ton, unrestricted bulk, Decatur, prompt delivery.

Waxes, Vegetable

Consumer interest in carnauba grades improved following price declines of 2c. to 4c. per pound. Trading was still spotty but lower prices brought increased buying interest especially for requirements during the balance of the year. Fatty grades were off 1c. to 2c., while yellows dropped 4c. The Brazilian market was steadier at recent declines and exporters showed more resistance to low bids. No 3 Ceara, crude was lower at 56c. to 58c. per pound spot, depending upon seller and quantity and Parnahyba, ranged from 58c. to 60c., same basis. No 3 refined was easier at 64c. to 66c., spot, as to quantity. No 2 refined also was lower at 72c to 74c., same basis.

Refined beeswax remained steady and moved in volume at unchanged quotations, reflecting the firmness of crude replacements. Cadelilla crude and refined remained steady and unchanged. Japan wax trading continued spotty.

ECH SPECIALS

Day #40 Imperial Mixer 150 gal. w'k, 40 hp
Abbe 5'x6' Jkt. Ball Mill, chrome mang. steel
Stokes Vac. Shelf Dryer, 2 shelves, 40"x42"
Pfaudler 1500 gal. Glass Tank, closed top
Blaw Knox SS 100 gal. Autoci, agtd. 1000 psi
Buflovak 4'x8' Lab. SS Dbl. Drum Dryer.
Simpson 24" SS Lab. Mix Muller, 1½ H.P.
New Niagara SS Vert. 24" Filter, 55.2 sq. ft.
Ribbon Blenders, SS & Steel, NEW & USED

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Top Values: 2—1000 gal. type 316 S/S Reactors ASME code complete with Agitators.
2—S/S Centrifuges 20" A.T. & M 12" Bird.
4—J. H. Day Pony Mixers 2½ gal., 8 gal., 15 gal., 40 gal.
2—Stokes Vacuum Pumps 149E, 212D.
1—Conical Blender 25 cu. ft. Gemco.
1—600 lb. Robinson Ribbon Blender
1—Micro Pulverizer Model 1SH.
8—60 gal. and 80 gal. S/S Groen Kettles.

We are anxious to receive your listings.

Keith Machinery Corp.

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COLUMNS

78"x18'—14 trays.
72"x30'—21 trays.
48"x41'—40 trays.
36"x20' Packed.
14"x17'6" Packed.
12"x18'8" Packed.
20"x27'; 16"x21' Gl. Lined.

FIVE CHEMICAL PLANT LIQUIDATIONS NOW IN PROGRESS WRITE FOR CATALOGS

HEAT EXCHANGERS

2300 sq. ft. 564— 1"x15' tubes.
1000 sq. ft. 370—¾"x14' tubes.
800 sq. ft. 375—⅝"x14' tubes.
615 sq. ft. 375—⅝"x10' tubes.
420 sq. ft. 268—¾"x 8' tubes.
306 sq. ft. 130—¾"x12' tubes.
225 sq. ft. 96—¾"x12' tubes.
188 sq. ft. 96—⅝"x12' tubes.
146 sq. ft. 91—⅝"x8'6" tubes.
68 sq. ft. 22—¾"x16' tubes.
(8) 77 sq. ft. Fintube.
2", 3", 4" Glass Pipe Coolers.

TANKS

108,000 gal. 18'x61'.
17,500 gal. 15'x16'.
11,500 gal. 12'x15'.
10,500 gal. 10'x23'.
4,500 gal. 6'x25'.
4,000 gal. 8'x12'.
3,500 gal. 8"x 9'.
1,200 gal. 5'x 8' Clad.
750 gal. 5'x 5'.
500 gal. 4'x 5'.
(20) 400 to 50 gal.
2,500 gal. Glass Lined.

REACTORS

Pfaudler ELL 500 & 300 gal., 75 Psi Glass Lined, jacketed, agitated.
Dopp 1700 to 1000 gal. Ni-Resist, jacketed, Type "J" agitator, 150 PSI.
Patterson 500 gal. Steel, jktd., agit., 50 PSI.
Alloy Tank 750 gal. 316 Stainless 42 PSI.
Alloy Tank 300 gal. 316 Stainless 42 PSI.

KILNS & DRYERS

Link Belt 604-24 S.S. Roto Louvre.
Link Belt 7'x45'x½" Rotary Dryer.
4'x40'x⅜" Rotary Dryer, New Shell.
Buflovak 6"x8" Vacuum Double Drum.
Blaw Knox 6'x5'6" Vacuum Single Drum.
F. J. Stokes 38A—16 Tray Dryer.
Link Belt 7'x45'x½" Rotary Kiln.
Allis-Chalmers 8'x60'x⅜" Rotary Kiln.
Vulcan 6'x124'x¾" Rotary Kiln.
Ruggles 10'x100' Rotary Dryers.

CENTRIFUGES—FILTERS

Sharples C27 Stainless Super-D-Hydrator.
Sharples #6 Super Centrifuge S.S. bowl.
Rochester 30" S.S. Susp. Centrifuge.
Bird 4'x12" S.S. Rotary Vac. Filter.
Goslin 36"x24" S.S. Rotary Vac. Filter.
Kelly #50 Pressure Leaf Filter.

MISCELLANEOUS

Swenson 435 sq. ft. S. S. Evaporator.
Baker Perkins DIM 300 gal. Stainless Sigma Blade Mixer.
Stokes RDS2, DDS2 Rotary Presses.
Rotex 60"x84", 30"x96" Sifters, 1 Deck.
Sweco 48" Triple Deck Sifter.
Swenson 24"x20' S.S. Crystallizers, Jktd.
Nash L3 Hytor SS Vac. Pump 140CFM@15".
Nash #4 Hytor Vac. Pump 650CFM@15".
SS Centrif. Pumps 1" to 3"; 10 to 750 GPM.

Our Stock geared to your needs. If not listed—ask for it.

HEAT & POWER CO., INC.

60 E. 42nd Street, New York 17, N. Y. • MU 7-5280
310 Thompson Bldg., Tulsa 3, Okla. • LU 3-4890

BUY IT NOW!

Sharples C-27, Super D Hydrator, 316 S/S.
Fletcher Centrifuge, Suspended 48" dia.
Bird 40" x 60" Solid Bowl Continuous, S/S, UNUSED.
Sweetland Filters #7, #12.
U.S. Auto Jet Self-Cleaning Filter 54".
Buflovak Drum Dryer 5'x12', Chrome Roll.
Oliver Precoat Filters 8'x6' & 8'x10'.
Oliver Horizontal Filter 6 'D, 316 S/S.
Swenson Evaporators 3625 & 5780 sq. ft.
Pfaudler 100 gal. glass lined jktd. Reactor.
Spray Dryer S/S, Lab & Production Sizes.
Link Belt Dryer, Roto Louvre, 604-24, 316 S/S.
Link Belt Rotorary Dryers 8' x 40'.
Rotary Kiln 7' x 120'
Banbury Mixer #3.
Baker Perkins 100 Gal. Jktd. Double Arm Mixers.
Simpson 6' Dia. Intensive Mixer.
Simpson 40" Porto Muller.
CECO Adjustable Carton Glue Sealer, A3901-12.
Standard Knapp Case Sealer 606-6016.
Fitzpatrick Model D Comminuter.
Stainless Pressure Tanks, 50# 59"w x 52"V.
Exchangers and Condensers 500' to 4000'.
Petro Chem Furnace 1,000,000 BTU, UNUSED.

Send Us Your Inquiries — We Buy Your Surplus

N. J. SNOW EQUIPMENT CO.

507 - 5th Ave., New York City 17
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JA 2-0359

WIRE US COLLECT!

2—Shriver 30" x 30" plate & frame Filters. 50 chamb. Closed disch.
2—U.S. Autojet Filters. Model 400 sq. ft. Monel screens.
2—Allis-Chalmers, 5000 HP Generator sets. Complete with exciters, panel board, fan.
1—Link-Belt 705-20 Roto-Louvre Dryer. Comp/equipped. Mtrs., Blowers, Cyclone & Fire-box.
2—Tolhurst 26" SS perf basket Centrifuge. 2 speed mtr., w/plow.
1—Simpson Model #2 Mix-Muller type U.D. 6' dia. Pan. 15 HP double muller.
2—6' x 50' Rotary Dryers. ½" shell with mtrs., firebox & fans.
25—Stokes Model 212-C Vacuum Pumps. 100 CFM @ 10 microns. 5 HP.

For immediate quote, wire or phone collect—GA 1-1380

MACHINERY AND EQUIPMENT COMPANY
123 Townsend St. · San Francisco 7, California

PEBBLE MILLS: Abbe 6'x6', 4½'x5', 3'x4½', 24x18".
HAMMER MILLS: Jeffrey, Williams, Sturtevant, 20-30 h.p. motors.
MIXER: Banbury #3, 75 h.p. mtr.
MILL: Thropp 18x50", 125 h.p. mtr.
Agitators, Filters, Vacuum Pumps.

WHAT DO YOU HAVE FOR SALE?

BILL WOLF, Inc.
2708 CAROL ROAD UNION, N. J.
MUrdock 6-8883

2—OLIVER PRESS PRECOAT FILTERS 5'3"—Type 316 S.S.
2—RIBBON BLENDERS, 2500 gal., 1200 gal.
2—AUTOCLAVES S.S., 50 gal., 2000 lb., 3½ gal., 2000 lb.
1—DRUM DRYER, Proctor & Schwartz.
3—COLLOID MILLS, 5 HP EX PR., 40 HP.

Machinecraft Corporation
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

BAKER - PERKINS & DAY
15, 75, 100 & 150 GALS.
DOUBLE ARM MIXERS

PFAUDLER 10 GAL. CLOSED JACK GLASS LINED KETTLE

CENTRIFUGALS—12" 30" 40" & 48".
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5' x 26' Rotary Stainless
Stokes vac shelf dryer 22—40"x40" shelves
Buffalo 32" x 90" Double Drum Dryer
Buffalo Vac. Drum Dryer 24" x 26".
Despatch Ovens Elec. Heated.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—#2 Sweetland Filter.
Niagara S.S. Leaf Filter 45.5 sq. ft.
Oliver Rot. Vac. Filter 3' x 1'.
Hercules Leaf Filter 36" dia.
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Steel Alum & Copper 5 to 2,000 gals.
MILLS—Day HY-R Speed Mill, 20 HP XP.
Raymond #00&0000 Pulverizers
Mikro Pulverizer #4, 2SI, 2TH, 1SH.
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #3 & #2XX Hammer Mills.
Taylor-Stiles 7½ HP Cutter.
Rotary Cutters 1 HP & up.
Sprt-Wald Stainless Spike Crusher.
Pebble, Jar & Ball Mills, Lab to 6' x 8'.
3 Roll, 9" x 24", 12" x 30", 16" x 40".
Lehmann 4 Roll W. C. 12" x 36" Steel.
MIXERS—Baker Perkins 100 gal. Jack.
Baker Perk. 15 gal. horiz. Mixer
Day Imperial 75 & 150 gal. mixers Jack Change Can Mixers 5, 15, 40 gal.
Day Jumbo 700 gal. horiz. Mixer.
Spr. Wald. 10,000 # horiz spiral mixer
Orv Simpson Rotex Sifters 40"x84"
Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 10,000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Colton 4½ T, etc.
Stokes R single punch & RD1 rotary.
TANKS—Stainless, GL., Lined, Steel.
MISC. Boilers Gas & Oil. Conveyors.

Partial Listings — Write for Bulletins

STEIN EQUIP'T CO.
107 8th St., Brooklyn 15, New York
STerling 8-1944

LIQUIDATIONS

CLEVELAND, OHIO

1—Raymond #73612 Super High Side 6-Roll Mill, with whizzer, cyclone, piping and motors.
1—Raymond #6669 Super High Side 6-Roll Mill, with whizzer, cyclone, piping and motors.
1—Raymond #5047 High Side 4-Roll Mill, with whizzer, cyclone and piping.
1—#1 Raymond Impact Mill, with whizzer, cyclone and piping.

1—Kilby Nickel Single Effect Force Feed Evaporator, 1200 sq. ft.
2—Oliver 5'3"x4' Nickel Clad Rotary Vacuum Filters.
2—Pfaudler 300 and 200 gal Glass Lined Jkt. Agt. Reactors.
1—Sperry 30" C.I. Filter Press, 27 chambers.
1—Buflovak 32" x 90" Double Drum Dryer.
4—Feinc 8'x12' Rotary Vacuum Steel Filters, string discharge.
2—6'6" dia. x 60' Rotary Dryers.
1—5½' x 4½' x 60' Rotary Dryer.
7—Dorr 80' and 40' thickeners.
3—Vogt 387 sq. ft. Rotary Pressure Filters.
2—Chicago Pneumatic 26"x14" Vacuum Pumps with 150 HP motors.
2—Fuller Kinyon Pumps H6.
1—Link-Belt 24"x90' Belt Conveyor.
5—Nickel Centrif. Pumps, 2", 3".

KANSAS

1—8650 sq. ft. Forced Circulation Double Effect Evaporator, nickel clad bodies, nickel tubes, condenser, etc., UNUSED.
1—Louisville 4½' x 40' Rotary Steam Tube Dryer, 316 SS construction.
5—Glascote 500 gal. glass lined, Jacketed Reactors.
5—Pfaudler 26 sq. ft. glass lined Condensers.
1—Bird Young 18" x 24" rubber covered Rotary Vacuum Filter with Hastelloy "C" valve.
3—Lightnin Model 322-TEQ Drives, with rubber covered turbine agitators.

BRILL FOR VALUES

CENTRIFUGES

3—Bird 18" x 28", 24" x 38" Solid Bowl Continuous 304 S.S.
1—Bird 40" x 60" Solid Bowl Continuous 316 S.S. UNUSED.
5—Sharples C-20 and C-27 Super-D-Hydrator 316 S.S.
2—Sharples PY14, PN14 Super-D-Canters 316 S.S.
2—Sharples #16, 304 S.S., 3 HP motor.
1—Tolhurst 40" 347 S.S. Imperforate basket 15 HP UNUSED.

TANKS

25—500 to 3500 gal. Vertical 304 S.S. Tanks opened and closed, some agitated.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—1500 gal. Stainless Pressure Tank, 5' x 10', 90#.
1—2000 gal. Horizontal 304 S.S. Tank, 5' x 12'.
1—2500 gal. Vertical 304 S.S. Tank, 8' x 7'.
1—10,000 gal. Rubber Lined Tank, 10' x 17'6".
1—5500 gal. 316 S.S. Clad Pressure Tank 250 PSI.
2—3,000 gal. Aluminum Tanks, 7' x 11'.
5—25,000 gal. Aluminum Storage Tanks.

REACTORS—EVAPS—CONDS—COLS

1—Pfaudler 125 gal. 304 SS Jkt. Agit. Reactor, 150# int., 125# jacket.
2—Pfaudler 50 gal. glass lined, Jacketed, Agitated Reactors.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—O. G. Kelly 3000 sq. ft. 309 S.S. force feed Evaporator UNUSED.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—300 sq. ft. Swenson 347 SS Single Effect Evaporator.
1—250 sq. ft. Buflovak 304 SS Single Effect Evaporator.
10—Stainless Heat Exchangers; 910, 536, 370, 250, 131, 70 sq. ft.
1—4'6" x 46' 316 S.S. Clad Column, 250 PSI.
8—3'x20', 30"x19' 347 SS Packed Columns.
1—24" x 35' 304 S.S. Bubble Cap Column.

FILTERS

1—Niagara 110 sq. ft. Vert. 316 S.S.
1—Niagara 92 sq. ft. Vert. Jkt. 316 S.S.
2—#10 Sweetland, 27 lvs. 4" centers.
1—#5 Sweetland 304 S.S., 120 sq. ft.
1—Oliver 6' dia. Horizontal 316 S.S.
1—Oliver 4' dia. Monel Horizontal.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet.
1—Hercules 400 sq. ft. 304 S.S. Pressure.
3—Oliver Precoat 5' x 6', 5' x 10', 8' x 10'.
1—Oliver 5'3" x 8' Steel Rotary Vac vaportite housing.
1—Feinc 3' x 1' 316 S.S. Rotary Vac.

DRYERS

1—Buflovak Vacuum Shelf, 17 - 60" x 80" shelves.
2—Buflovak 42" x 120", atmospheric double drum complete.
1—Buflovak 32" x 90" Atmos. Twin Drum.
2—Devine 4' x 9' single drum, atmospheric.
1—Buflovak 3' x 10' Rotary Vacuum.
6—Louisville Rotary Steam Tube 6' x 30', 6' x 50'.
2—Louisville 8' x 50' Stainless Steel lined Rotary.
3—Rotary Dryers 4' x 40', 6' x 50', 7' x 80', 8' x 80'.
1—Louisville 4½' x 25' Inconel Rotary.
1—Link Belt 6'4" x 24' Roto Louvre, 316 SS.
1—Atmos. Tray, 13 shelves, 3' x 3'.
2—10' and 4' dia. 304 S.S. Spray Dryers.
2—Wyssmont, 304 S.S. 6'2" and 9'6" dia.

MIXERS

1—Sturtevant 75 cu. ft. 304 S.S. Rotary Batch Blender 20 HP.
1—Abbe 110 gal. 304 S.S. Jacketed Agitated Vacuum Dispersall Mixer.
2—Baker-Perkins 150 and 100 gal jacketed double arm Sigma blades.
1—Baker-Perkins 50 gal. Jacketed.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
2—40 and 50 cu. ft. Powder Mixers 304 SS.
2—Day 120 cu. ft. Jumbo Powder Mixers 25 HP motors.
1—45" dia. Lancaster Mixer 7½ HP motor.

MISCELLANEOUS

3—Kinney Vacuum Pumps, 1000 cfm, 10 microns, 15 HP.
3—Hardinge 6' x 36", 5' x 22" steel lined conical Ball Mills.
1—Sturtevant 6' dia. Air Separator, 10 HP.
1—Komarek Briquetting Press 3½" face rolls.
tam.
3—Mikro Pulverizers, 1SH, 1SI and Ban-
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—Tyler Hummer 3' x 10' Double Deck Screens.
5—Day Roball Sifters, 40" x 120", 40" x 84", Double Deck.
6—Nash H6, H5, L5 Vacuum Pumps.
3—Nash H6, L3 347 S.S. Vacuum Pumps.
2—Stokes Rotary Tablet Machines DD2-DDS2.

Partial List of Values — Send for Complete Details

BRILL EQUIPMENT COMPANY
35-61 JABEZ STREET, NEWARK 5, N. J.

Telephone: MArket 3-7420
N. Y. - REctor 2-0820

LIQUIDATIONS— LITTLE ROCK, ARK. ORANGE, TEXAS OMAHA, NEBRASKA

STAINLESS STEEL TANKS

3—20,000 gal. vert. T316LC SS crystallizing tanks, 14'x15' cone bottom, cone top, 3/8".
6—13,300 gal. vert., T321 SS, 11'10"x15'x7".
1—12,000 horiz., T304 SS, 9'6"x20', dished, UNUSED.
4—10,000 gal. vert., T316 SS, 12'x12', 3/16", Turbine Agit., Nettco #WT-37 drive, 15 HP.
7—5800 gal. vert., T316 SS, 10'x10', 3/16", Turbine Agit., 10 HP.
2—5700 gal. horiz. T304 SS, 6'4"x24', UNUSED.
2—4500 gal. vert., T304 SS, 8'x12', UNUSED.
18—3650 gal. vert., 10'x7', open top, 3/16".
1—3400 gal. horiz., T304 SS, 6'6"x16', dished.
1—3350 gal. vert., T304 SS, 8'x8'6", dished, 50 psi WP, w/Agit.
1—3300 gal. vert., T304 SS, 6'x14'6", dished.
1—3250 gal. vert., T316LC SS, 6'x15'10".
1—3200 gal. vert., T304 SS, 6'6"x12', dished.
2—3000 gal. vert., T304 SS, 6'x15', dished.
3—3000 gal. horiz., sanitary milk tanks.
2—3000 gal. vert., T347 SS, 5'x19', ASME 60 psi.
7—3000 gal. vert., T316 SS, 8'x8', Agit.
1—2800 gal. horiz., T304 SS, 5'x18', dished.
2—2600 gal. vert., T316 SS, 7'x8', dished, coils.
1—2350 gal. vert., T304SS, 5'x16', 3/16", coils.
1—2250 gal. vert., T316LC SS, 6'x8', flat heads, 3/16".
1—2100 gal. vert., T316 SS, 7'x6'3", dished.
5—2100 gal. vert., T304 SS, 8'x5'6", dished.
1—2100 gal. vert., T316 SS, 6'x9'10".
1—2000 gal. vert., T304 SS, 8'x5', cone.
1—2000 gal. horiz., T304 SS, oval.
1—1650 gal. vert., T304, 5'x11', dished.
60—1350 gal. horiz. T347 SS, 4'x14' coils, dished, 60 psi.
1—1300 gal. vert., T304 SS, 6'x6', dished.
9—1300 gal. vert., T321 SS, 7'x4'6".
1—1200 gal., vert., T304 SS, 4'x12'6", dished.
2—1100 gal. vert., T347 SS, 4'x11', 60 psi.
100—Stainless tanks, 14 to 1000 gal.

MICS. TANKS

8—28,000 gal. horiz. steel, 11'x38', 75 psi WP.
7—28,000 gal. horiz. lead-lined, 11'x38', dish.
1—14,000 gal. horiz. steel, 8'x30', 250 psi WP.
10—11,500 gal. horiz. Pfaudler blue glass-lined, 8'x30', dished, 20 psi.
2—11,000 gal. horiz. steel, 8'x27', 300 psi WP.
2—9000 gal. horiz. steel, 8'x23', dished.
8—5800 gal. vert. rubber-lined, 10'x10', stainless turbine agit.
1—5500 gal. horiz. Alum., 8'6"x12', dished.
45—5200 gal. horiz. steel, 6'x24', dished.
1—3000 gal. vert. copper, 8'x8', dished.
1—2100 gal. vert. Alum., 6'x10', dished.

DRYERS — KILNS

5—F. J. Stokes #138J-16 Vacuum Shelf Dryers, 195 sq. ft., 16 shelves.
1—Buflovak 98 sq. ft. Vac. Shelf dryer.
2—Buflovak 42"x120" Dbl. drum dryers, ASME 160 psi.
1—American 42"x120" Dbl. drum dryer, stainless.
1—Buflovak 32"x52" Dbl. drum dryer.
1—American 36"x84" Dbl. drum dryer, vacuum.
1—Buflovak 6"x8" Dbl. drum dryer, Vac.
1—Buflovak 5'x12' single drum VACUUM dryer—UNUSED.
1—Vulcan 10'x11'x175' long rotary kiln, 2-tires, 13/16".
3—10'x100' rot. dryers, 5/8" welded.
1—Link-Belt #900-30 Roto-Louvre dryer.
2—Bartlett & Snow 8'x6"x70' rotary dryers, 3/8" welded.
1—Davenport 8'x60' rot. dryer, 7/16" welded.
1—6'x150' rotary kiln, 5/8" welded.
1—Link-Belt #604-18 Roto-Louvre dryer.
1—Louisville 5'x30' steam-tube dryer.
2—Louisvile 4'x6"x25' steam-tube dryers.
1—Standard Steel 3'x23' rot. dryer.
1—B. & S. 3'x19' dryer, complete.
1—3'x15' Everdur shell dryer.
1—12"x8' Stainless rot. dryer.
3—B. & S. 14"x18'5" rot. stainless calciners.

AUTOCLAVES — KETTLES — REACTORS

1—2000 gal. Glascote blue G/L reactor, jacketed, ASME vacuum int., 95 psi jkt.
55—1400 gal. Pfaudler blue G/L jacketed kettles, Stainless cover, 3 HP Agit., baffle.
4—1350 gal. T347 SS jkt. kettles, Agit.
14—1250 gal. Pfaudler blue G/L jacketed closed reactors, Agit. vacuum, w/cond.
1—1000 gal. Dopp Cast Iron Kettle, 125 psi jacket, 25 HP anchor Agit.
1—1000 gal. T316 SS jkt. reactor, ASME, UNUSED.
2—1000 gal. Patterson steel dissolvers, jkt. & Agit.
4—800 gal. Struthers-Wells T316ELC SS clad autoclaves, 3'-6"x10', horiz., ASME 400 psi WP, w/(3) vert. titanium Agit.
1—750 gal. Graver T304 SS jkt. reactor, Agit.
1—600 gal. Stainless jacketed evaporating & crystallizing kettle, Agit.
5—600 gal. Pfaudler Stainless Steel jacketed kettles.
2—500 gal. T304 SS jkt. reactors, ASME, Vacuum, UNUSED.
6—465 gal. T304L SS reactors, 150 psi int, 165 psi jkt.
1—300 gal. Pfaudler blue G/L reactor, jkt., Agit., ASME.
1—300 gal. Clascote blue G/L reactor, jkt., Agit., ASME.
1—300 gal. T304 SS jacketed reactor, ASME, UNUSED.
68—250 gal. Pfaudler blue G/L kettles, jkt.
2—200 gal. T304 SS jkt. reactors, ASME, UNUSED.
1—200 gal. Readco jkt., T304 SS, Dbl. Motion Agit.
1—175 gal. horiz. Titanium autoclave, 2'x7', 1000 psi, w/(3) vert. Agit.
1—175 gal. T304 SS jkt. reactor, Agit.
2—125 gal. T316 SS jkt. fermenter kettles.
2—100 gal. T304 SS jkt. reactors, ASME, 80 psi jkt., vac. int.—UNUSED.
1—30 gal. Pfaudler blue G/L jkt. reactor.

MIXERS — MILLS

40—Baker Perkins #17, 200 gal. double-arm mixers.
1—Baker Perkins #15-UUMM, 100 gal. dispersion-blade jkt. mixer, 100 HP.
1—Baker Perkins #15, 100 gal. sigma-blade jkt. mixer, T347 SS.
1—Day 100 gal. sigma mixer, T304 SS.
2—J. H. Day #5, 75 gal. sigma mixers.
1—Sturtevant #7, 75 cu. ft. T304 SS blender.
1—Worthington 75 cu. ft. rotary blender.
1—Raymond 66", 6-roller hi-side mill.
1—Raymond 50", 5-roller hi-side mill.
1—Hardinge 8'x48" conical pebble mill.
2—Hardinge 7'x36" conical pebble mills.
1—Allis-Chalmers 6'x12' rod mill, 125 HP.
1—Bonnot 5'x10' ball-rod mill, 75 HP.
3—Allis-Chalmers 5'x22', ball-tube mills.
12—Abbe Eng. 6'x8' batch pebble mills.
2—Patterson 8'x10' batch pebble mills.
3—Fitz. SS mills: #D, F, K-8.

AT LITTLE ROCK, ARK.

150—Worthington Worthite cent. pumps: 4"x3", 3"x2", 2"x1-1/2", etc. W/motors.
60—LaBour 2" self-priming stainless centrif. pumps, w/motors.
60,000'—Stainless Steel pipe, sch. 10 & 40, 1", 2", 3", 4", 6", etc.
10,000'—Stainless Steel vapor pipe; 6", 12", 16" & 20" dia.
10,000—Stainless Steel flanged valves: gate, globe, check—all sizes & Mfrs.

COLUMNS—HEAT EXCHANGERS EVAPORATORS—BOILERS

2—Vulcan T316SS 10 plate bubble-cap columns: 110", 60" dia.
1—36" dia. x 6 plate T316SS column.
6—30" dia. x 19' T347SS packed columns.
8—24" x 16' Duriron cast packed columns.
1—24" x 33' Duriron SS packed column.
20—Copper bubble-cap columns: 20" to 54" d.
1—1960 sq. ft. T316 SS exchanger, ASME.
2—1450 sq. ft. T316 SS condensers.
6—1450 sq. ft. Stainless gas heat exchangers.
3—1000 sq. ft. Duriron pipe coolers.
1—900 sq. ft. T304 SS horiz. exchanger.
2—800, 730 sq. ft. T316 SS heat exchangers.
6—691 sq. ft. copper Dbl.-pipe coolers.
8—400 sq. ft. T304 SS pipe coolers.
12—Amer. Heat Reclaiming T316L SS spiral heat exchangers: 162, 73 sq. ft.
3—131 sq. ft. T304 SS horiz. exch., ASME 75 psi.
15—75 sq. ft. nickel 2" IPS pipe coils.
20—T316 SS condensers & heat exchangers: 510, 427, 410, 400, 390, 290, 277, 264, 250, 50, 47 sq. ft.
20—Duriron pipe coolers, 10 to 170 sq. ft.
7—4000 sq. ft. single-effect calandria evap., copper tubes, C.I. bodies.
1—1250 sq. ft. Mojonnier Stainless evap.
1—1060 sq. ft. Gen. Amer. T316 ELC forced circulation evaporator, 1953, w/pumps, piping, etc.
3—Buflovak double-effect Stainless Vert. long-tube type evaporators: 840, 710, 588 sq. ft.
1—630 sq. ft. Struthers-Wells T316 SS calandria evap.
1—370 sq. ft. Henzey Stainless evap.
1—320 sq. ft. Steel reboiler evap.
1—250 sq. ft. Buflovak T304 SS evap., forced circulation, recompression.
1—118 sq. ft. F. J. Stokes T316 SS still.
5—Comb. Eng. 435 HP boilers, 300 psi.
3—Edgemoor waste-heat boilers, 250 psi.
2—Keeler 200 HP coal-fired boilers.
3—Kewanee Package boilers, 15 psi, gas-fired; 135, 30, 15 HP.
1—Besler 40X pack. boiler, 1100 psi.

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1—Bird 24"x38", steel cylin. bowl.
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1—Sharples 16-P centrif., T304 SS, pressure-tite.
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1—Tolhurst 48" susp., T304 SS perf.
4—A.T.&M. 40" susp., T304 SS perf. & solid.
1—A.T.&M. 40" susp., T316 SS, perf., 30/5 HP.
1—A.T.&M. 32" susp., T304 SS, perf.
1—A.T.&M. 12" susp., T304 SS perf.
5—Shriver 48" cast iron P. & F. filter presses, 50 chambers, Hyd. closure, 1250 sq. ft.
3—Valley 36" Alum. P. & F. filter presses, 65 chambers, Hyd. closure, 1000 sq. ft.
1—Sparkler 88 sq. ft. 304 SS filter, #RSC, horiz. tank, vert. leaf.
4—Eimco 8'x8' rot. vacuum filters.
1—Eimco 4'x8' rot. vacuum filters, T316 SS, precoat.
3—Feinc 3' dia. T316 SS horiz. rot. vac. filters.
1—Oliver 3'x4' T316 SS rot. vac.
2—Oliver 5'3"x3' rot. vac. filters, T316 SS.
6—Davenport dewatering presses: #1A, 2A, 3A.
2—Niagara #36H-350-2, T316 SS filters, horiz. tank, vert. leaf, 350 sq. ft., jacketed.
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DuPont's Argentine Affiliate To Double Nylon Production

Ducilo SAIC, an Argentine affiliate of E. I. duPont de Nemours & Co., plans to double the production of nylon textile yarn and install new facilities to produce nylon tire yarn at its Berazategui plant in Buenos Aires to meet the rapidly growing demand in the Argentine market.

Construction work on both projects will start immediately and the facilities are expected to be in the operation next year.

Allied Fills New Post

Allied Chemical Corporation today (Oct. 23) is announcing the appointment of Dr. Frank L. Holloway to fill the newly-created position of manager of market development for the plastics division. Others appointed to serve in this new department include David W. Towler, John J. Taylor, and Eugene B. Hilker. Dr. Holloway was previously Allied's technical representative in Washington, D. C.

Trade Names Chemicals & Specialties

—Continued from page 47

weight, are available for use in such applications as nonslip floor waxes, foamed rubber latexes, reproduction paper coatings and wool spinning and soil resistant compounds for textile fibers.

Although preparation of a sol merely involves mixing the silica with water, variations in pH, concentration of the sol, degree of dispersion of the sol, and rate of addition of the silica will produce sols with a wide range of properties for use in specific applications.

In latex foam, where the silica is used to increase load bearing characteristics, high concentration silica sols (up to 30 percent) are required at a very low viscosity.

On the other hand, in latex paints, where silicas would be used as anti-settling and flow control agents, a concentration below 10 percent but at high viscosity levels would be needed.

In reproduction paper coatings, where silica is used to increase depth of color and line sharpness, different conditions exist. Blueprint paper requires an alkaline dispersion, while for diazo paper an acidic dispersion is required. In these applications concentration has been found considerably less important than agglomerate size.

Silicas Used on Carpets

In soil resistant compounds for rugs and carpets collodial silicas are believed to be effective because they lodge in surface sites which might otherwise be occupied by dirt particles.

In non-aqueous systems there are four general areas of industrial use. These include applications as a thickener and thixtropic agent in polyester and epoxy resins, greases and sealing compounds, as a reinforcing agent in silicone rubber and neoprene solvent adhesives, and as a suspending agent in paints or a flatting agent in varnishes and lacquers.

In dry solid systems, finely-divided silica products are finding use as anticaking agents, as dispersing agents for plastics, pigments and fillers, as insulating agents, and in fluidized bed coatings.

Probably one of the biggest volume applications for collodial silica is as a thixotropic agent in polyester-glass reinforced plastics. Since polyester resins themselves are not thixotropic, they tend to drain away from the glass substrate when used in molding or coating operations where sections of the mold are slanting.

As a result, the product is not uniform in thickness or composition when cured. Use of a proper amount of colloidal silica is said to improve quality of such products as automobile bodies, boats, chairs, and household appliances. In addition, raw material waste and production time are reduced.

In general, low viscosity polyester resins wet reinforcing glass more readily than high viscosity resins but they also tend to present greater drainage problems. Consequently a compromise between wetting and drainage is usually sought.

Wider Resins Choice Possible

Use of colloidal silica permits a wider choice of resins in that it will thicken a low viscosity resin sufficiently to prevent drainage, but will not destroy the better wetting characteristics of this resin. The same thickening effects have been noted with epoxy resins as is the case with polyesters.

Dip-coating of vinyl dispersions in applications where a rapid deposit of heavy coating is desired is particularly suited to the use of a thixotropic agent.

In the case of single units such as gloves and dishdrainer baskets the flow properties of the dispersion and the rate of withdrawal are of prime importance in determining the thickness of the coating.

In increasing consistency of organisols and plastisols, use of the thixotropic agent makes possible a wider choice of plasticizers since flow properties of the plasticizer can be adjusted with the thickener.

Three different types of finely divided silica—pyrogenic, aerogel, and hydrogel—are reported as the most generally accepted materials for producing flat varnishes and flat and semi-gloss lacquers. Because of the inherent physical properties of each type, the properties imparted to lacquer and varnish systems vary.

Carbon black, which sells at about one-sixth the price of colloidal silica, is the normal reinforcing agent used in rubber manufacture. However, colloidal silica is applicable with silicon rubber as a reinforcing agent, in neoprene adhesives to increase cohesive strength, and in butyl rubber which is to be extruded for wire coatings.

Coating Materials

—Continued from page 57

zirconium drier catalyst solution, marketed as a paint additive to speed up the drying of paint films which dry by oxidation polymerization. Zirconium is a metal that has catalytic action on the drying metals such as cobalt and manganese.

When a zirconium drier catalyst solution is used with other metal driers, it is said that quite frequently in certain finishes, the drying time is cut in half. End-product applications of the zirconium organic acid complex is in such finishes as varnishes, alkyds, trim enamels, and similar products.

Naval Stores

According to the United States Department of Agriculture, Naval Stores Division, rosin sales for the week ended October 13, amounted to 4,399 drums equivalents compared with 5,103 the previous week and 8,712 the week before. Sales for plants, prompt, drums WW $11.80-$11.95, WG $11.75-$12.30 mostly $11.75-$12, fancy $11.80-$12.25, M and below $11.55-$11.95, tankcars M and below $11.25, bags, fancy $12-$12.15.

Sales export f.a.s. ports drums, prompt, WW $11.90-$12.20 mostly $11.95-$12.15, WG $12.10-$12.23 M and below $11.75. Forward, WG $12.

Turpentine—Over-all sales 54,000 gallons compared with 57,415 gallons the previous week. Tankcars, f.o.b. plants, prompt, 22½c. to 23c. Average price paid producers for commercial pine gum week ending October 13 was $31.90 per barrel. Receipts of 17,817 barrels were 1,561 more than same week last year. Loan receipts 81 percent.

Average commercial crude gum price $31.90 per standard barrel week ending 10-7-61, previous week $32.40, year ago $45.90. Loan price this week $27.20, volume gum delivered this week 17,817 including 14,464 loan, previous week 19,617 including 15,279 loan, year ago 16,256 including 268 loan. Average barrel content turpentine 10.03 gallons, rosin 299.7 pounds. Gum grading 38 WW, 32 WG, 17 N, 12 M, 1 K and below.

Coating Materials Briefs

EXTRUSION POLYETHYLENE COATING RESINS: Seven polyethylene resins designed for extrusion coating and laminating of paper, paperboard, foil, films and fabrics are announced by Dow Chemical Company.

Designated "CG," for Coating Grade, the resins vary in melt index and density to contribute specific properties needed in different packaging, construction, and textile applications.

Packaging is a prime sales target in this relatively new coating field, according to Dow spokesmen. Package applications for these resins can range from multi-wall bags and boil-in-bag pouches to milk carton stock and overwraps.

"Extrusion coating consumption of polyethylene resins rocketed from almost nothing in 1951 to over 65 million pounds in 1961," Dow comments. "Further dramatic growth is dependent on new uses and specialty resins to make those uses competitive. The Dow "CG" resins are expected to stimulate such growth."

POLYETHYLENE MILK LINERS: New disposable milk containers, offering savings in weight, space and costs, are now replacing metal cans in dairies across the country.

Marketed by the Plastics Department of Weyerhaeuser Company, Camden, N.J., they are constructed of heavy-duty, kraft containerboard with a Celanese polyethylene liner in three, five and six gallon sizes.

Besides guaranteeing sanitary conditions for the handling of bulk milk, bulk cream or ice cream mixes, these new disposable containers are crush-proof, collapsible, lightweight and highly economical in storage and delivery truck space. More than a year of laboratory and in-service tests were carried out under all conditions to determine their performance and customer acceptance prior to full scale production.

Patents Chief Is Only Lukewarm to S 1552

—Continued from page 3

ment that ethical drug prices and profits are "excessive and unreasonable."

He was immediately called to task by two Republican committee members: Sen. Everett M. Dirksen of Illinois and Sen. Roman R. Hruska of Nebraska.

Sen. Dirksen said the Kefauver statement is "very unfortunate," and that, at least, the Tenesseean should have made it clear that his remarks represent only his own opinion.

Sen. Hruska's feelings on the mattter were summed up later in the week in an address before the National Wholesale Druggists' Association in Miami, Fla. He charged that the hearings "demonstrate a studied effort to downgrade" the drug industry.

What Ladd Finds Wrong

Among the things that Commissioner Ladd finds wrong with S 1552 is the requirement that drug patent holders license other manufacturers after three years, instead of maintaining exclusive control of seventeen years as permitted under present patent law.

Here are some of the flaws he sees in the licensing provisions of the bill:

- There is no provision for prior notice, hearing or review.
- The licensing not only of the patented invention but also of technical information not comprising part of the patent grant "seems punitive rather than remedial."
- "We question whether the fixed ceiling of 8 percent is in line with what are regarded as commercially reasonable royalties in arm's length patent license contracts, including those relating to drugs."

On the compulsory licensing idea itself, Mr. Ladd said that there is as yet no administration position, but he urged the committee to go slow before writing such a concept into law.

The big question, he stated, is whether compulsory licensing "does not have, on balance, countervailing bad effects on the inventive motivation of the patent system, and, that in the light of these factors the public interest and the public health are adversely affected."

Industry observers take this to mean that the Patent Office chief is leaning away from compulsory licensing, a position somewhat at variance with the hands-off attitude of assistant Attorney General Lee Loevinger.

Mr. Loevinger's Hands-Off Attitude

Mr. Loevinger told the committee a month ago that "the term during which a drug patent should be a full monopoly" is something congress will have to decide.

Mr. Ladd has doubts about the provision giving Food & Drug Administration the power to pass on efficacy before a drug patent is issued.

"The commissioner thinks it would be helpful for FDA to review drug patents, but he made it clear that the agency's opinions should be advisory only "to assist the Patent Office in forming its judgement."

The Patent Office chief also took exception to the provision banning the patenting of drug modifications, declaring that there is "no particular reason" for excluding such an invention "if it otherwise complies with the law."

He similarly is against the provision calling for the denial of patent for a drug modification unless the Secretary of Health, Education & Welfare determines it has "significantly" greater therapeutic effect, than products on the market.

Robert R. Larson, president of the American Patent Law Association, vigorously attacked the measure, declaring there are "compelling" reasons "why this bill" should never become law."

The patent provisions of the legislation, he said, would discourage research incentive at a particularly crucial time in the nation's history, particularly in view of the "astonishing progress" made by the Soviets in recent years in some fields of technology.

Technological Race for Survival Cited

"It has been truly said," Mr. Larson continued, "that we are in a technological race for survival. The plain fact is that we must out-invent our adversary in every field (including of course, the field of chemical compounds and drugs), or we may well be buried.

"It is for this reason that so many share with us the conviction that anything which tends to destroy, diminish or detract from the incentive of our patent system, is bad —dangerously bad.

"S 1552, we feel, is bad for this reason. However well-intended are its aims, its provisions substantially destroy the incentive to invent, limit the incentive to disclose and kill the incentive to invest in new drug inventions and their production and marketing."

He contended that the legislation sets up a "double standard" with regard to the patentability of drugs and condemned as "confiscatory" the requirement that drug houses offer licenses to all comers three years after the effective date of the patent.

"Next to abolishing patents altogether," Mr. Larson stated, compulsory licensing "comes closest to abolishing the incentive the patent would normally provide."

Thomas M. Ferrill, jr., acting chairman of NAM's patents committee, asserted that the effect of the bill would be exactly opposite to Sen. Kefauver's stated purpose: to lower drug prices.

"Higher drug prices would be the inevitable result," Mr. Ferrill declared.

He maintained that compulsory licensing would mean higher drug prices because the patent holder would have to charge higher royalties if required to make the patent available to all comers, including inexperienced companies.

Curtailment of Investment Incentive Seen

Mr. Ferrill, who is patent counsel for the Philco Corporation, said that any limit on patent protection would "curtail the incentive for investment in extensive research laboratories," and that S 1552 would greatly complicate the procedures for the issuance of patents in the medical field.

He also pointed out that the measure would restrict the rights of companies to agree among themselves in the settlement of patent disputes, despite the fact that the Justice Department has given its blessings to such settlements as an aid to cutting down the clogging of courtroom calendars.

Clarence R. Miles, manager of the legislative department of the Chamber of Commerce, echoed APLA and NAM fears that S 1552 would kill the incentive for invention in this country "by undermining confidence in the patent system." Mr. Miles' views were contained in a letter to the committee.

Paul S. Bolger, a New York patent attorney representing the New York Patent Law Association, declared that if any corrective legislation is needed for the drug industry—and he is not convinced of that—S 1552 is not the way to go about it.

He argued that the ban on interference settlements "would be illegal as applied to applications for drugs." What it would do, he said, is prolong prosecution, increase expenses and delay the issuance of patents.

Mr. Bolger contended that the singling out of the drug industry for special anti-trust treatment is a bad thing, since trust law should "always" have a "generality and adaptability comparable to that found to be desirable in constitutional provisions."

Against Splitting Patent Authority

He sees no need for the division of patent responsibility between the Patent Office and HEW, and agrees with Messrs. Larson, Ferrill and Milse that the bill will reduce the incentive to invent.

However, a Chicago patent attorney who is also an inventor, Harold N. Vagenius, is convinced that compulsory licensing will not cut medical research spending.

In fact, he believes that it "could have a tendency to eliminate any attempts to use patents on drugs in illegal restraint of trade."

What's more, he told the committee, compulsory licensing after three years "can contribute greatly to realistic and competitive price policies for the drugs."

Mr. Vagenius also favors giving HEW the final say on the effetiveness of a new drug before issuing a patent. Patent officers, he asserts, "do not have the education and background, nor the sound judgment, of the persons available to the Secretary of HEW."

However, he thinks there are some technical faults in the patent provisions of the legislation, and offered some suggestions to the committee to make the bill more effective.

Even more enthusiastic about S 1552 is Glenn Wilson, medical care manager of the Nationwide Insurance Company. In fact, he feels that the measure does not go far enough, particularly in regard to pharmaceutical patents.

"We have a deep conviction," he told the committee, "that some changes are necessary in the patent procedure if real economic competition is to be introduced into the drug field."

Mr. Wilson offered in evidence an eighteen-month study by Nationwide into the US drug industry. In a letter to the committee, Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association, called attention to a number of errors in the study.

While conceding that some mistakes had crept into the study, Mr. Wilson held his ground, however, on the question of prescription drug costs.

The share drugs take out of the medical care dollar is on the rise, he contends. PMA maintains that the figure—20 percent—has remained constant since the early 1930's.

Plea by Bjorksten

Dr. Johan Bjorksten, president of the American Institute of Chemists, pleaded with the committee not to drive medicochemical inventors away from the pharmaceutical industry.

It is, he said, "the last niche" where "they still can find opportunity and will to create."

Summing up his oposition to S 1552, Dr. Bjorksten said that the bill's provisions would produce these results:

"They would reduce the investment in chemical and medical research both; they would reduce oportunities for professional chemists by reducing the rewards for invention which are now used to pay their individual rewards.

"They would not only reduce these rewards to a vanishing point, but they would introduce time lags which are more discouraging than anything else for the man in creative pursuit of a research goal.

"They would drive the most creative chemists away from pharmaceutical research into other industries not similarly hampered."

Crippling of Research Seen

Dr. Henry B. Hass, chemical research director for the M. W. Kellogg Company, Jersey City, N. J., argued that the patent provisions of the bill would cripple "vital research by taking away the financial support without which it cannot succeed."

Dr. Hass, who spoke on behalf of the Association of Research Directors, felt that the committee "should be seeking means to increase the profits of the pharmaceutical industry so that it would be able to expand its research effort."

The organic chemist was also against giving FDA the authority to establish generic names for drugs. This task, he said, "should be in the hands of medical and pharmaceutical experts who are most competent to choose wisely."

However, Dr. Hass indicated that he has no objection to FDA's passing on the efficacy of drugs, the inspection of pharmaceutical manufacturing plants nor to the licensing of drug producers.

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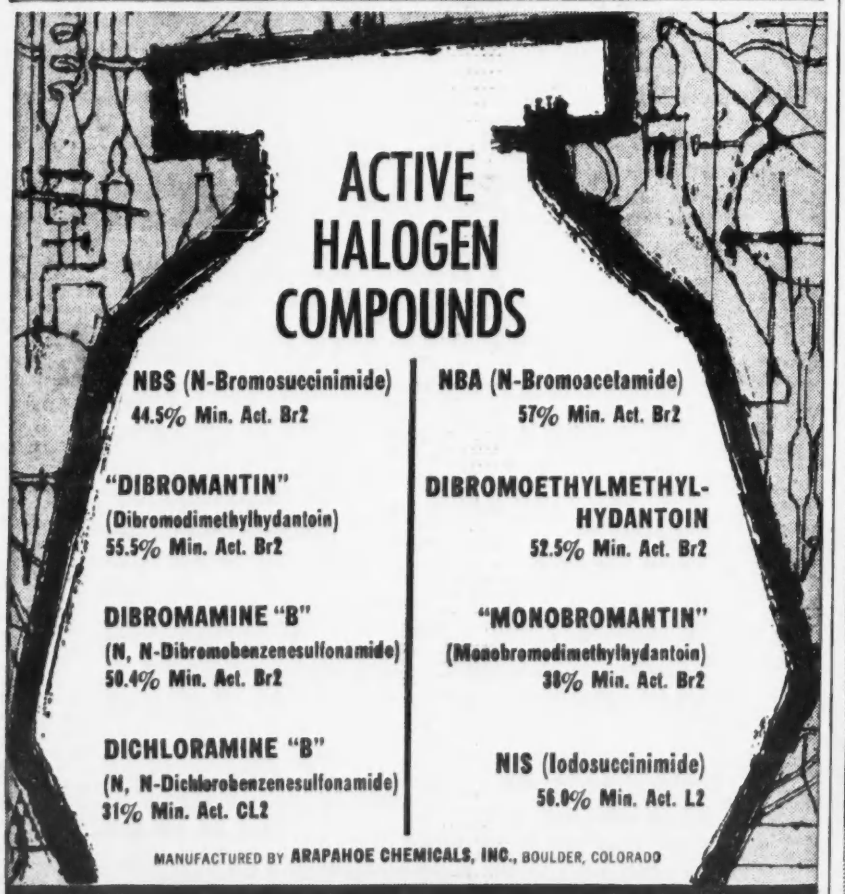

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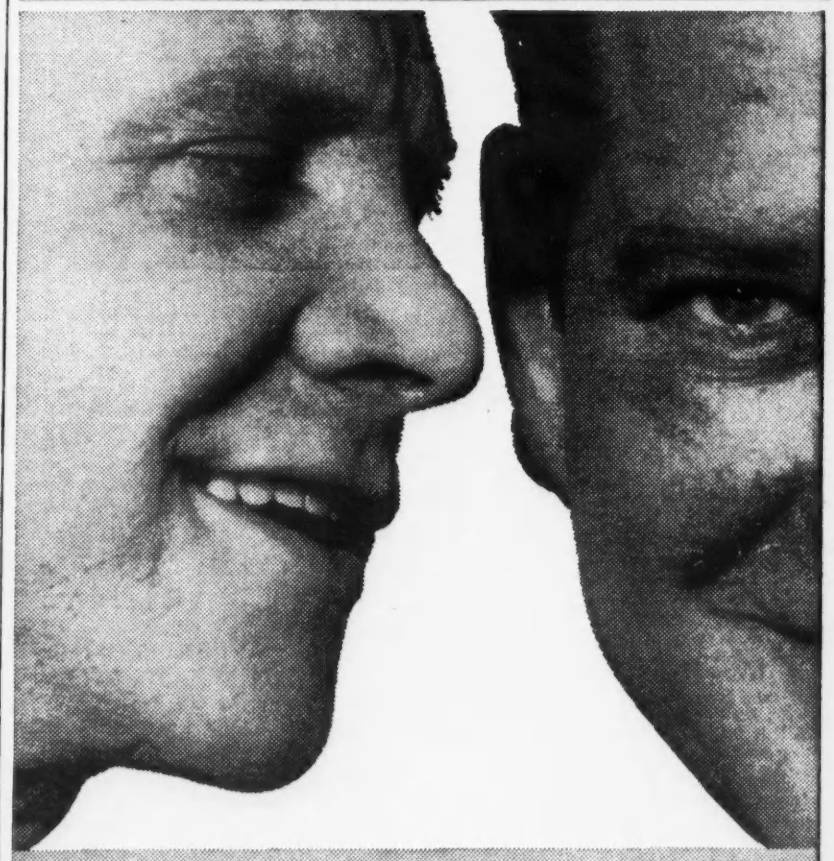

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